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HIGHER EDUCATION ADMINISTRATORS & STUDENTS WITH DISABILITIES:  
A SURVEY OF ADMINISTRATOR KNOWLEDGE & TRAINING NEEDS

by

Maribel S. Guillermo

A dissertation submitted in partial fulfillment

of the requirements for the degree of

Doctor of Education

University of San Diego

2003

Dissertation Committee

Susan Zgliczynski, Ph.D., Chair  
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Bobbie J. Atkins, Ph.D., Member

## Abstract

Students with disabilities enroll in two-year institutions at a higher rate than in four-year institutions. The California community college system, which is the largest system of higher education in the world, enrolled 2,609,365 students with disabilities during the 2000-2001 academic year. The purpose of this study was to focus on California college administrators and their role in: (a) setting a climate that supports students with disabilities and (b) serving as a resource to faculty and staff.

Administrators were surveyed regarding their (a) current knowledge and training needs; (b) personal and professional experience with individuals with disabilities; and (c) utilization of existing training and resources. Comparative data were collected from Disabled Students Programs and Services (DSPS) professionals to identify significant differences in existing knowledge, information need, utilization of existing training and resources, and experience.

Administrators were knowledgeable about how to accommodate students, but were less knowledgeable about who was responsible for the various steps associated with the accommodation process. The findings indicated that administrators needed more information about their institutions' commitment to barrier-free access to learning as well as the overall physical accessibility of the campus. The DSPS group rated administrators' need for information significantly higher than the administrator group.

The administrators who participated in this study reported a higher rate of interaction with students with disabilities and seemed more aware of the DSPS role compared to other studies. These findings suggest there are promising developments

occurring at California's Community Colleges, which make it a favorable environment for students with disabilities.

## Dedication

*To my family:*

*Mark Edmonds*

*for his unwavering support and  
holding our family together.*

*He is truly the best husband and father anyone could wish for.*

*Kyle and Wessley*

*the loves of my life,  
for always being there to remind me  
of what is really important in life.*

## Acknowledgments

The completion of this study would not have been possible without the guidance, expertise, and support of a number of people. First and foremost I would like to acknowledge and express my gratitude to my dissertation committee: Dr. Susan Zgliczynski for serving as my committee chair and providing the leadership, direction, and statistical expertise I needed to succeed; Dr. Jerome Ammer for serving as a member of my committee and the constructive feedback that helped me to direct my writing to college administrators; and Dr. Bobbie J. Atkins of San Diego State University for serving as an outside committee member, presenting me with the opportunity to initiate this study, and providing me with the expertise and support to see it through.

I am also thankful to Dr. Ron Jacobs of San Diego State University and Dr. Lucinda Aborn of El Camino College. Dr. Jacobs was instrumental in the development of the survey and provided me with invaluable assistance during the data analysis. Dr. Aborn was instrumental in the collection of data including obtaining letters of endorsement from the California Community College Chancellor's Office and the California Association of Postsecondary Education and Disability (CAPED).

I would like to acknowledge Ms. Cathy Happersett and Dr. Ray Munoz for helping me convert the database to SPSS format. Dr. Debra Wright provided excellent feedback in the final editing stage, which transformed the document from a draft to a final version.

Thanks to the California Community College Chancellor's Office and CAPED for their endorsement of the study; the DSPS coordinators who so willingly disseminated the

instruments on their respective campuses; and the many counselors and administrators who participated in this study.

Finally I would like to express my appreciation to my parents, Simeon and Mabel Guillermo, for instilling in me the value of education. They provided me with the foundation that has carried me through the many years of education. My hope is that people with disabilities will forge ahead in the pursuit of postsecondary education so that they too can reap the benefits of a higher education.

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## Chapter 1

### Introduction

Federal legislation such as Section 504 of the Rehabilitation Act of 1973, the Individuals with Disabilities Education Act of 1997 (IDEA), and the Americans with Disabilities Act of 1990 (ADA) has resulted in significant progress for people with disabilities. For example, prior to the IDEA children with disabilities were placed in separate schools and institutions. Currently, over one million children are being educated in neighborhood schools (Office of Special Education and Rehabilitative Services, 1999). In another example, a woman with mental retardation successfully filed a discrimination suit against the Georgia Department of Human Resources for failing to place her in a community-based program. "Under Title II [of the ADA], the court concluded, unnecessary institutional segregation constitutes discrimination, which cannot be justified by a lack of funding" (Legal Information Institute, 1999, ¶2). Numerous other examples exist that reflect the significance of current legislation and its implementation for people with disabilities (McCusker, 1995; Milani, 1996; Tucker, 1996). Yet despite these advances it seems people with disabilities continue to lag behind the general population in employment, income, and education. This research will focus on the postsecondary education of students with disabilities and the knowledge and information higher education administrators need to provide better education for these students and to fully realize the goals and intents of Section 504 and the Americans with Disabilities Act on college and university campuses.



The participation of students with disabilities in postsecondary education has steadily increased since the passage of Section 504 of the Rehabilitation Act of 1973. In 1978, 2.6% of postsecondary students reported having a disability. The figure rose to 9.2% in 1994, followed by a significant increase in 1996 of 19% (Getzel, Stodden, & Briel, 2001). However, while there are more students with disabilities pursuing postsecondary education than ever before, enrollment remains 50% lower than the general population (Stodden, Jessen, & Lolotai, 1998). Reports indicate that students with disabilities enrolled in institutions of higher education encounter difficulties in persisting or completing their education (Colley & Jamison, 1998; Hicks-Coolick & Kurtz, 1997; Horn, Berkold, & Bobbitt, 1999; Mellard, Hall, & Parker, 1999). In a review of literature, Stodden, Jessen, & Lolotai (1998) discovered that one of the main reasons students do not succeed in postsecondary settings is the lack of appropriate academic development services, supports, and programs for students with disabilities.

These findings signal an urgent need to improve the capacity of institutions of higher education to meet the postsecondary needs of students with disabilities. Administrators in higher education settings are presented with an opportunity to further enhance the quality of the education, programs, and services offered in their institutions. Enhancing an institutions' capacity to include and accommodate students with disabilities requires the leadership of higher education administrators. Presidents, vice presidents, chancellors, and deans typically play key roles in setting the vision and goals for their institutions, departments, and programs. In this capacity, administrators can help to shape and guide how colleges and universities respond to the diverse needs of their student population.

### *Statement of the Problem*

As reflected in the literature, students with disabilities in higher education settings are not receiving the range of services and supports they need to persist and obtain their degrees. Administrators have the responsibility for ensuring programs and supports are available to students with disabilities, but it is unclear whether administrators have the knowledge to design and implement appropriate programs. This study will: a) investigate how knowledgeable administrators are about their institutions' responsibilities and services related to students with disabilities and b) attempt to identify areas in which administrators may need more information and training.

It is widely accepted that knowledge increases a leader's capacity and potential to make appropriate changes and advances toward a vision and goal. In colleges and universities, administrators' knowledge regarding disability, legislative mandates, and best practices is pertinent to creating an accessible institution for all students. Specific to students with disabilities, "administrators want to do the right thing, but they have often been frustrated by not knowing what that is" (Rothstein, 1998, p. 2). In order to set clear policies and regulations, administrators must be knowledgeable of both the students' rights as well as the institution's legal obligations to students with disabilities. Moreover, administrators must be able to communicate these rights to the faculty and staff who have ongoing, direct interaction with the students. Knowledge of existing resources, models, and practices that effectively address the needs of students with disabilities is essential in addressing faculty and staff needs for training in this area.

### *Background of the Problem*

Seventy two percent of two-year and four-year postsecondary institutions in the United States enrolled students with disabilities between 1996 and 1998 (Lewis & Farris, 1999). The increasing number of students with disabilities pursuing postsecondary education has created new challenges for colleges and universities (HEATH Resource Center, 1996; Rothstein, 1998; Stodden, Jessen, & Lolotai, 1998). The complexity of disability issues, increasing disability-related litigation, and increasing importance of technology for people with disabilities have magnified the issue of serving students with disabilities in institutions of higher education (HEATH Resource Center, 1996). Notably, the U.S. Department of Education, Office of Civil Rights (OCR), charged with enforcing Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, found institutional violations as early as the admissions stage. These violations involved inquiries about the disability during pre-admission and application of lower weights to standardized test scores if the test was taken with an accommodation (Milani, 1996). One university violated Section 504 when the readmission committee discriminated against a student with a disability by denying a petition for readmission based on stereotypes rather than facts (Milani, 1996).

Many of the violations may be a result of negative attitudes towards people with disabilities, lack of awareness, or resistance to change. Students with disabilities are also often confronted with the negative stereotypes associated with disabilities from peers and instructors. Brugstahler's (1994) review of literature revealed that negative experiences reported by college students with disabilities were linked to attitudes of university

personnel and other students, faculty's lack of awareness about accommodations, and students' dissatisfaction with services.

Legislative mandates, combined with more students self identifying and seeking services, have focused attention on the responsibilities of institutions to students with disabilities. As students become increasingly knowledgeable of their rights, they are advocating for services, support, and accommodations to facilitate their success in higher education and ultimately their chosen careers. On the other hand, administrators and faculty are often unprepared to effectively and uniformly respond to these needs and demands. Additionally, while some faculty are receptive to accommodating students with disabilities, others doubt their ability to teach students with disabilities (Enright, Conyers, & Syzmanski, 1996; Fitchen, Goodrick, Tagalakis, Amsel, & Libman, 1990; Nelson, Dodd, & Smith, 1990). Teaching in itself is difficult for many faculty because they lack the pedagogical background in teaching. While they are experts in their fields and content areas, faculty without any teacher training often encounter problems in conveying their expertise to their students. Students with disabilities add another dimension to teaching making it more challenging for faculty who have not received any teacher training.

Other critical issues facing colleges include disability documentation, responding to students with mental illness, and alternative testing (Duff, 1999). "Substantial changes in the postsecondary environment will be required if the benefits of postsecondary education are to accrue to more youths with disabilities" (Fairweather & Shaver, 1990, p. 345). These changes must occur at all levels, from administration to instruction and programs to services. The combined and sustained efforts of informed and

knowledgeable administrators, faculty, staff, and students are essential to the institutional and cultural change requisite for creating an environment conducive to the learning of all students.

### *Purpose of the Study*

The purpose of this study was to investigate the knowledge and information administrators currently possess and need to effectively and appropriately respond to challenges encountered by students with disabilities in higher education settings. The sample for the study was drawn from the California Community Colleges. The community college population was selected for this study since more students with disabilities tend to begin their postsecondary education in two-year institutions as opposed to four-year institutions (Fairweather & Shaver, 1990; Satcher, 1992; Vogel et al., 1998).

The California Community College system of two-year public institutions is composed of 108 colleges statewide organized into 72 districts. California Community Colleges serve over 2.5 million students and represents the largest system of higher education in the world. During the 2000-2001 academic year, 2,609,365 students with disabilities were enrolled in California Community Colleges (California Community College Chancellor's Office, 2001).

Administrators from 108 community colleges throughout California were surveyed regarding their current knowledge about their institution's responsibilities to students with disabilities as mandated by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Administrators were also surveyed to determine areas in which they felt more information was needed in order to meet the

needs of students with disabilities on their campuses. Moreover, the degree to which administrators participated in training, accessed resources, and their assessment of its value were examined. Information regarding administrators' prior experience with individuals with disabilities was gathered to determine the relationship, if any, between experience, knowledge, and training needs. Administrators surveyed included college presidents, vice presidents of faculty affairs, vice presidents of student affairs, deans, and associate deans.

Comparative data was collected from Disabled Students Programs and Services (DSPS) staff to determine if there were differences in existing knowledge, experience, and perceptions about information need and utilization of existing resources. Offices of Disabled Student Services located on college campuses have the responsibility for ensuring students with disabilities have equal access to all programs and services. Services often include verification of a student's disability, appropriate assessments to determine necessary services, identification of appropriate accommodations, provisions of assistive technology, and relevant information and referral. Qualifications for counselors in DSPS are that they possess extensive knowledge about what students with disabilities need in order to persist and succeed in college. The DSPS professionals confront daily the challenges presented by their institutions when serving and supporting students with disabilities. Thus, DSPS was the logical entity to share perceptions about the training and information needs of administrators as it relates to students with disabilities. Professionals from DSPS were included in this study to investigate how their perceptions regarding administrators' needs for more information and training compared to the perceptions of the administrators themselves.

### *Research Questions*

Based on a review of the literature and current research and training activities surrounding the issue of postsecondary education for students with disabilities, the following questions were formulated:

1. How informed are college administrators and Disabled Students Programs and Services staff regarding the responsibilities of various academic and community representatives to students with disabilities as mandated by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act?
  - a. What knowledge do administrators and Disabled Students Programs and Services staff possess regarding services and supports mandated under Section 504 and the Americans with Disabilities Act?
  - b. Is there a difference between the knowledge of administrators and Disabled Students Programs and Services staff regarding services and supports for students with disabilities?
2. How much personal and professional experience do administrators have with individuals with disabilities and how much training and resources have they accessed?
  - a. Is there a significant relationship between administrators' experience and level of involvement with individuals with disabilities and their reported knowledge regarding services and supports for students with disabilities?
  - b. Is there a significant relationship between administrators' level of participation in disability training opportunities and their knowledge regarding services and supports for students with disabilities?

- c. Is there a significant relationship between administrators' utilization of disability resources and their knowledge regarding services and supports for students with disabilities?
- 3. What information do administrators and Disabled Students Programs and Services staff perceive higher education administrators need to lead efforts towards enhancing colleges' responsiveness to postsecondary students with disabilities?
  - a. Is there a significant difference between administrators' and Disabled Students Programs and Services staff's perceptions regarding information administrators need to meet the needs of students with disabilities?
  - b. Is there a significant relationship between administrators' perceived need for information and their current knowledge regarding services and support for students with disabilities?
  - c. Is there a significant relationship between administrators' perceived need for more information and their personal and professional experience with disability?

#### *Rationale for the Study*

Administrators are critical to creating a programmatically and physically accessible institution (Hanson, 1979; Schuck & Kroeger, 1993). Their vision and leadership can help to shape an environment that is responsive to the needs of students with disabilities. However, the research base on administrators regarding students with disabilities is limited.

Several databases were utilized to identify existing literature for this study including the Educational Resources Information Center (ERIC), PsychInfo, Academic



Search, Educational Administration Abstracts, and Higher Education Abstracts. The descriptors or subjects used in the search included disabilities, special needs student, college student, administrators, administration, higher education, postsecondary education, colleges, staff development, and professional development. Most of the literature resulting from this search focused on elementary and secondary education, programs and services for students with disabilities, and faculty attitudes and experiences related to students with disabilities. Additional literature was identified using references from other studies. The literature search yielded a limited number of studies focused specifically on higher education administrators regarding students with disabilities. The limited literature highlights the need for further research in this area. Research is necessary to better understand the needs of higher education administrators as leaders in the advancement of educational opportunities for students with disabilities.

This research will provide data that may serve as a contribution to future work in the area of postsecondary education for students with disabilities. The data gathered may help to clarify what information and resources administrators need to be more proactive in responding to students with disabilities. For example, the data may be useful in developing disability training specifically for administrators and identifying professional development areas for faculty and staff.

### *Definition of Terms*

Accommodations – “An adjustment to the learning environment that does not compromise the essential elements of a course of curriculum” (Schuck & Kroeger, 1993, p. 63). Examples of accommodations include notetakers, sign language interpreters, assistive technology, test adaptations, and reduced credit loads.

Administrators – This term refers to college and university presidents, vice presidents of faculty affairs, vice presidents of student affairs, deans, associate deans.

Americans with Disabilities Act of 1990 – Landmark civil rights bill passed in 1990 which “guarantees that individuals who are otherwise qualified for jobs or educational programs will not be denied access simply because they have a disability” (Gordon & Keiser, 1998, p. 5).

Disabled Students Programs and Services (DSPS) – Office responsible for ensuring students with disabilities have equal access to all programs and services available on a college campus. Services include verification of student’s disability, assessment to determine necessary services, identification of appropriate accommodations, provision of assistive technology, and information and referral.

Experience with Disability – The respondent’s professional and personal involvement with individuals with disabilities. Professional involvement refers to students with disabilities, whereas personal involvement refers to whether the respondent has a disability or if respondent has significant others with disabilities.

Rehabilitation Act of 1973 –Legislation passed in 1973 which funded vocational rehabilitation programs and activities.

Section 504 –Subsection of the Rehabilitation Act which stated that “no otherwise qualified individual with a disability in the United States...shall, solely by reason of disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance” (29 U.S.C. 794).

*Assumptions of the Study*

1. Administrators and Disabled Students Programs and Services staff completed the survey thoughtfully and honestly.
2. The respondents were representative of administrators and DSPS professionals from two-year institutions in California.
3. Endorsement of the study from the California Association of Postsecondary Education and Disability (CAPED) and the California Community College Chancellor's Office encouraged administrators and DSPS professionals to complete and return the surveys.

*Limitations of the Study*

1. The survey included one question inquiring whether the respondent considers him/herself as having a disability. A respondent with a disability may have chosen not to disclose they have a disability.
2. The sample for this study was drawn from two-year institutions in California. The data collected in this study may not be generalized to four-year institutions or institutions in other states.
3. Surveys were returned anonymously preventing direct follow-up with colleges that did not respond to the initial mailing.
4. Surveys were distributed to all 108 community colleges in California. If some colleges failed to respond, the robustness of the research can be potentially compromised.

### *Summary*

The increasing enrollment of students with disabilities in postsecondary institutions is creating a challenge for administrators, faculty, and staff. Administrators must actively engage in efforts to ensure students with disabilities have equal access to the educational opportunities available in colleges and universities. Limited research is available that provides information on the needs of administrators regarding students with disabilities. This study sought to obtain data concerning administrator's current knowledge on disability related topics, their professional and personal experience with individuals with disabilities, and the information and resources they need to serve as leaders in this effort.

In Chapter Two, a review of the existing literature is presented. The literature reviewed include background on the implementation of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act; an overview of the experiences of faculty and administrators with students with disabilities; information regarding training activities for faculty and administrators in the area of disability; and a discussion on the leadership role of administrators in creating institutions that benefit all students.

In Chapter Three, the methodology for this study is delineated. This chapter includes a description of the sample, survey instrument, data collection procedures, and data analysis.

Chapter Four presents the data collected from the administrators and DSPS professionals. This chapter includes the demographics of the sample and analysis of the data according to the research questions.

A discussion of the findings is provided in Chapter Five. This section includes the findings according to the three main variables investigated: knowledge; perception regarding training needs; and personal and professional experience with disability. Implications of the findings and application to practice are presented along with recommendations for further study.

## Chapter 2

### Review of the Literature

In this chapter, the researcher provides a synthesis of current literature and research in the area of postsecondary education as it relates to students with disabilities. First, a profile on students with disabilities outlines some of the discrepancies between postsecondary students with and without disabilities. Second, the impact of federal legislation on postsecondary institutions is examined in terms of how institutions have interpreted and implemented the mandates of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Third, exploration of the literature concerning faculty and administrator attitudes and experiences provides some insight to the challenges facing both the institutions and students with disabilities. Fourth, studies concerning faculty and staff training present some initial directions for improving the responsiveness of institutions to students with disabilities. Finally, the role of the administrator is discussed in terms of their leadership in facilitating and creating an inclusive campus.

#### *Profile of Students with Disabilities*

Students with and without disabilities experience similar challenges when confronted with the demands of college. These challenges include making career decisions, maintaining a decent grade point average (GPA), balancing leisure interests with academic requirements, and taking care of financial obligations. There are additional challenges and requirements that appear related to the postsecondary education

of students with disabilities. Data indicates that students with disabilities in postsecondary education are less likely to persist, take longer to complete, and encounter more difficulties than students without disabilities (Horn, Berkold, & Bobbitt, 1999). In a measurement of persistence (Horn, Berkold, & Bobbitt, 1999), 56% of students with disabilities were still enrolled or had already attained a degree after five years as compared to 64% for students without disabilities. Another 47% of students with disabilities left college without a degree compared to 36% for their non-disabled peers.

Similar discrepancies were reported in a national longitudinal study comparing the participation of students with and without disabilities in postsecondary education (Blackorby & Wagner, 1996; Fairweather & Shaver, 1990). The National Longitudinal Transition Study of Special Education Students (NLTS) was mandated by the Office of Special Educational Programs (OSEP) and included over 8,000 secondary school students in special education in 1985 (Blackorby & Wagner, 1996). Data was first collected between the summer and fall of 1987 through telephone interviews with parents or guardians (Fairweather & Shaver, 1990).

The study conducted by Fairweather and Shaver (1990) focused on 1,242 students who: (a) were at least 17 years old when they left school and (b) provided data on postsecondary participation. Data from the National Longitudinal Transition Study was compared to data from the High School and Beyond Survey (HS&B) for students without disabilities. Results revealed that students with disabilities (15.1%) participated significantly less than students without disabilities (56%) in postsecondary education. “Nondisabled youth [were] three times more likely to take some community college courses and ten times more likely to take some 4-year college courses than youths with

disabilities” (Fairweather & Shaver, 1990, p. 339). Results also revealed tremendous variation in participation level across the different disability categories. Deaf students (39%) and students with visual impairments (43%) participated in postsecondary education to a greater degree than students with multiple disabilities (5%), mental retardation (6%), and learning disabilities (17%).

Blackorby and Wagner (1996) compared National Longitudinal Transition Study data collected in 1987 and 1990. The sample was comprised of 1,990 students who met four criteria: attended special education in 1985-1986; left secondary school by September, 1987; parents completed the 1987 telephone interviews; and student or parents completed the 1990 interview or questionnaire. The sample differed slightly from the Fairweather and Shaver (1990) study, which targeted students who were at least 17 years old when they left secondary school. Some of the data collected in the Blackorby and Wagner (1996) study were obtained directly from the student whereas the Fairweather and Shaver (1990) data was collected from parents. Blackorby and Wagner (1996) also compared data for students with disabilities to students without disabilities using the National Longitudinal Survey of Youth. Despite the slight differences in samples and data collection, findings from the Blackorby and Wagner (1996) study were similar to the Fairweather and Shaver (1990) study. The authors concluded that students with disabilities continue to lag behind students without disabilities in postsecondary participation. The percentage of students with disabilities attending postsecondary school nearly doubled from 1987 to 1990 while the percentage of postsecondary students without disabilities increased by only 15%. Despite the increased participation, students



with disabilities are not attending postsecondary schools at the same rate as their nondisabled peers.

The level of postsecondary participation also increased in each disability category. Similar to the results of Fairweather and Shaver (1990), Blackorby and Wagner (1996) discovered variation between disability groups. Students with sensory disabilities (48% - 60%) attended postsecondary school in 1990 at a higher rate than students with mental retardation (13%) and multiple disabilities (9%). The authors recognized that students with disabilities have made tremendous inroads in postsecondary institutions, but substantial gaps still exist in terms of educational attainment. There are many reasons that may explain the gap in educational attainment between students with and without disabilities. These reasons range from poor preparation in high school to lack of accommodations in the classroom; and from low expectations of instructors to negative attitudes towards students with disabilities. Examination of the literature concerning the legislative impact of Section 504 of the Rehabilitation Act (1973) and the Americans with Disabilities Act (1990) on institutions of higher education may provide greater insight and understanding regarding challenges and barriers encountered by students with disabilities in colleges and universities.

#### *Impact of Federal Legislation on Postsecondary Institutions*

Two primary pieces of legislation directly impact colleges and universities and their responsibilities and obligations to students with disabilities. Both Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 mandate the provision of educational opportunities to qualified individuals with disabilities. Section 504, which was part of the Rehabilitation Act Amendments of 1973, made it mandatory

for institutions receiving federal funds to serve individuals with disabilities. In 1990 the Americans with Disabilities Act extended these mandates to private and other institutions not covered under Section 504. Both legislation mandate that institutions provide “meaningful access to the services, benefits, and programs that they offer” (Heyward, 1993, p. 18). The physical environment of institutions was no longer the only criteria for determining whether a campus was accessible to students with disabilities. Accessibility also encompassed program alterations and modifications which facilitate the meaningful participation of students with disabilities in courses, programs, and activities. Physically accessible institutions were useless to students with disabilities if they were unable to access programs because the institutions failed to consider reasonable alterations and modifications to its academic programs (McCusker, 1995). The mandates impact the way education, support, and services are delivered. Specifically, accommodations must be provided to students with disabilities so they can fully participate in the educational experience.

Initially, institutions were not receptive to the idea of providing accommodations for students with disabilities. Institutional resistance was reflected in the length of time, four years, it took to pass the final regulations for Section 504. At the time, institutions were primarily concerned about the cost of providing accommodations. The regulation stated that “disabled students had a right to program access with no fee charges greater than charged regular students” (Milani, 1996, p. 1019). The institutions felt the cost of accommodations, including the provision of auxiliary aids, should be covered by state vocational rehabilitation agencies, the Veterans Administration, and private charities. Over two decades after the final regulations for Section 504 of the Rehabilitation Act

(1973) were passed and over a decade after the passage of the Americans with Disabilities Act (1990), the argument over accommodations continues to dominate cases presented to the Supreme Court and other courts.

In a review of 1998 – 1999 cases, Weber (1999) found that “cases concerning reasonable accommodation and its converse concepts of undue burden, fundamental alteration, and undue hardship were prominent in the disability discrimination case law” (p. 360). Reasonable accommodation is no longer the only point of contention in cases challenging Section 504 and the Americans with Disabilities Act (1990). Cases presented to the courts also focus on more fundamental issues regarding students’ abilities and a faculty’s right to academic freedom. In *Pushkin v. Regents of the University of Colorado* (1981), the 10<sup>th</sup> Circuit Court of Appeals ruled in favor of the student who was denied admission based on his disability. The court ruled that colleges cannot make broad statements about a student’s ability based on disability label and associated stereotypes. *Wynne v. Tufts University School of Medicine* (1991) further ruled that academic freedom was not a legitimate argument for refusing to accommodate a student with a disability (Scott, 1994). Judicial cases such as *Pushkin v. Colorado Regents* (1981) and *Wynne v. Tufts University* (1991) helped to define the parameters of Section 504 and the Americans with Disabilities Act of 1990. Legal challenges to legislation is inevitable when implementation of the law requires a fundamental shift in attitude, perspective, and philosophy regarding the inclusion of people with disabilities (Tucker, 1996). The letter of the law is subjected to tremendous scrutiny, but equally important is the challenge to maintain the spirit of the law.

It is critical that both the letter of the law as well as the spirit of the law are taken into consideration when examining the applicability and relevance of both Section 504 of the Rehabilitation Act (1973) and the Americans with Disabilities Act (1990). The letter of the law refers to the specific definitions and provisions outlined in the legislation and regulations. For example, under Section 504 a qualified student with a disability is defined as an individual who “meets the academic and technical standards requisite to admission or participation in the education program or activity” (45 C.F.R. §84.3(k)(3)). The regulations further delineate the institution’s obligation to provide the student with auxiliary aids or reasonable program modifications.

The spirit of the law emphasizes the underlying intentions of the legislation and the original reason and purpose for the legislation’s existence. The intention behind the definition of a qualified student with a disability, combined with the provision for auxiliary aids and program modifications, ensure that individuals with disabilities are not excluded from postsecondary programs based solely on their disability. While the letter of the law may seem clear and straightforward, its interpretation will often contradict the spirit of that law. The Supreme Court case, *Southeastern Community College v. Davis* (1979) reflects this contradiction. The student sued the college for denying her admission to the nursing program based on her hearing disability. The court ruled in favor of the college who argued that her admission was not denied solely based on her disability, but also on how her disability affected her ability to perform (Guthrie, 1979).

Subsequent rulings after *Southeastern College v. Davis* (1979) continued to challenge the notion of qualified student. In cases such as *Pushkin v. Regents of the University of Colorado* (1981) the courts ruled in favor of the student. In other cases

such as *Ohio Civil Rights Commission v. Case Western Reserve University* (1996) the courts upheld the Davis decision. These rulings demonstrate the complexity of legislation related to students with disabilities.

Despite this complexity, the overall objective of the law is clear – elimination of barriers to postsecondary education for individuals with disabilities. A new way of thinking may be required to fulfill this objective. Colleges and courts must focus on the individual, not the disability, and be receptive to accommodating their unique needs (Tucker, 1996). The mandates are not new, but institutions are still perplexed about their role and responsibilities as it pertains to students with disabilities. Institutions' resistance and confusion regarding implementation of these laws is partly due to the fact that it requires a paradigm shift to which institutions are often slow to adopt.

Two decades after the Rehabilitation Act of 1973 was passed, numerous colleges and universities are still out of compliance (McCusker, 1995). A review of both Supreme Court and Office of Civil Rights cases demonstrate several areas in which institutions continue to contest and challenge the mandates of Section 504 of the Rehabilitation Act (1973) and Americans with Disabilities Act (1990). These areas include: (a) the extent of an institution's obligation to accommodate a student with a disability; (b) the extent of an institution's obligation to waive or substitute course requirements or adjust an academic program due to a student's disability; (c) the definition of what constitutes a qualified student; and (d) the extent to which admission practices screen out persons with disabilities. Court decisions are important to help clarify and define the roles and responsibilities of both institutions and students. Yet the immediate challenge as it

relates to students with disabilities appears to be occurring on the college campus with biggest barrier being attitude.

### *Experiences of Faculty and Administrators*

The literature reveals numerous weaknesses concerning institutions' abilities to meet the needs of college students with disabilities. References to faculty's lack of awareness and knowledge about disabilities and accommodations are common (Askamit, Morris, & Leuenberger, 1987; Getzel, Stodden & Briel, 2001; Lewis & Farris, 1999; Mellard, Hall & Parker, 1999; Mowbray & Megivern, 1999; Rothstein, 1998; Stodden, Jessen & Lolotai, 1999). Attitude of the university community toward students with disabilities is often cited as a critical issue (Baggett, 1994; Burgstahler, 1994; Collins, 2000; Denny & Carson, 1994; Enright, Conyers & Syzmanski, 1996; Getzel, Stodden & Briel, 2001; MacLean & Gannon, 1997; Malakpa, 1997; Mellard, Hall & Parker, 1999; National Center for the Study of Postsecondary Educational Supports [NCSPEs], 2000). Reviews of case law further demonstrates that institutions are still encountering problems implementing Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (Heyward, 1993; McCusker, 1995; Milani, 1996; Rothstein, 1998; Ryan, 1993; Scott, 1994; Tucker, 1996; Weber, 1998, 1999). This section will highlight research on faculty and administrators in regards to knowledge of disability, provision of accommodations, and attitude.

*Knowledge.* Baggett's (1994) study assessed faculty's knowledge of disabilities, experiences with educating students with disabilities, and attitudes toward students with disabilities. The relationship between knowledge, experience, and attitude was also examined. Findings were based on faculty responses to mailed surveys and guided

interviews with deans, department heads, and administrators. Baggett (1994) concluded that faculty and administrators lacked experience teaching students with disabilities and were unfamiliar with disability legislation and services on campus for students with disabilities. However, faculty and administrators were supportive of accommodating students with disabilities and responses to the attitudinal questions were generally positive (Baggett, 1994). The author expressed some reservations regarding the results. Faculty and administrators should have been more knowledgeable about disability services if they were truly supportive of students with disabilities (Baggett, 1994).

Baggett's study is limited by several factors. First, the sample was drawn entirely from the University of Massachusetts at Amherst, which limits the generalization of the findings to other institutions. Second, only 37% of the faculty responded to the survey, leaving 63% unaccounted for. Finally, interviews were conducted with department heads representing all of the colleges within the university with the exception of Natural Sciences and Mathematics. While Baggett's (1994) conclusions could not be generalized to the university itself it provided some important initial data regarding faculty and administrators' knowledge about disability legislation and services.

In a study conducted by Thompson, Bethea, and Turner (1997), 845 faculty and administrators at a southwestern university were surveyed to determine their knowledge of disability laws. The survey contained 25 items about Section 504 of the Rehabilitation Act (1973), the Americans with Disabilities Act of 1990 (ADA), Individuals with Disabilities Education Act of 1990 (IDEA), and recent court cases. Forty seven percent of the surveys were returned with a very low return rate for administrators (8%). Similar to Baggett's (1994) study, Thompson, Bethea, and Turner (1997) found university faculty

and administrators were generally lacking in knowledge regarding disability laws. Thirty percent or more of the respondents answered incorrectly or did not know 17 out of the 25 survey items. Half of the respondents were familiar with *Brown v. Board of Education* and the ADA; however, only 28% were knowledgeable about IDEA and less than 18% knew about Section 504. Eighty percent correctly responded to the statement regarding the student's right to accommodation superseding the instructor's academic freedom. Yet 50% of the respondents did not know about the legal parameters and extent of their obligation to provide reasonable accommodations.

Thompson, Bethea, and Turner (1997) concluded that the university was at an increased risk for a noncompliance issue or lawsuit due to the high percentage of respondents who were not knowledgeable about the requirements of the law. One of the limitations of this study was the low representation of administrators whose primary responsibilities include overseeing the proper implementation of federal legislation in institutions of higher education. Conceivably, greater legislative knowledge would have been reported if more administrators participated in the study as in the Jacobs and Jacobs (1984) study.

Jacobs and Jacobs (1984) conducted a study involving 40 department chairs and program directors from a mid-western state university. The study focused on administrators' knowledge of Section 504, its intent, and its program implications. Findings revealed that respondents with fewer years as administrators were more knowledgeable about Section 504. Administrators with less experience may have had more exposure to Section 504 in their training or were more inclined to stay abreast of legislation to further their careers. Another finding revealed administrators from



departments with more female faculty (home economics, special education, psychology, student teaching) were more knowledgeable about Section 504. These departments teach Section 504 in their curriculum and therefore instructors must be knowledgeable about the legislation and its implementation. Jacobs and Jacobs (1984) concluded that administrators require more training in the requirements of Section 504.

*Provision of Accommodations.* Accommodations and auxiliary aids appear to be factors that seriously impact college success for students with disabilities. The provision of accommodations for students with disabilities has been an ongoing issue for institutions of higher education since the passage of Section 504. The National Center for the Study of Postsecondary Educational Supports (NCSPEs, 2000) reported that disability policies regarding accommodations were not reflected in actual practices. Students “still must struggle to get very basic accommodations” (NCSPEs, 2000, p. 10). These accommodations ranged from accessible buildings to alternate forms of text for students who were blind.

Accommodations seem to elicit questions regarding responsibility, fairness, course integrity, and academic freedom. As long as these questions exist, students with disabilities encounter challenges and barriers at the postsecondary level. Williams and Ceci (1999) expressed skepticism about the method used for determining accommodations for students with learning disabilities. They also expressed concern about other students being short-changed when the professor and teacher’s assistant devote time to accommodating the student with the disability. These concerns are further substantiated in other studies focused on accommodation.

Satcher (1992) surveyed faculty members from 13 community colleges in Mississippi to determine their comfort level with providing accommodations for students with disabilities. Surveys were mailed to 250 randomly selected faculty from 13 community colleges in Mississippi. Ninety-three surveys were returned for a response rate of 37%. The research reported that faculty were more comfortable with tape recorded lectures, notetakers, extended time on exams, and use of pocket calculators and dictionaries during classes and tests. On the other hand, faculty were most uncomfortable with accommodations that they felt negatively impact the integrity of the course. These accommodations involved giving partial credit when the final answer was wrong; allowing misspellings and incorrect grammar without penalty; and allowing extra-credit assignments. Other concerns expressed by faculty included the additional time required to provide accommodations and the risk of setting up a student for failure in cases where faculty felt postsecondary education was not appropriate.

Nelson, Dodd and Smith (1990) also studied faculty's willingness to provide accommodations. The study involved faculty from a northwestern college representing Arts and Sciences, Education, and Business. The findings reported that the accommodations faculty were most willing to provide were tape recorded lectures and permission for proofreaders to assist in grammar and punctuation. The accommodations faculty were least willing to provide were once again related to accommodations they felt threatened the integrity of the curriculum. Such accommodations included extra credit assignments that were not available to the entire class and allowing spelling, punctuation, and grammar errors without penalty. An analysis of variance (ANOVA) revealed

education faculty were significantly more willing to accommodate students than faculty from Arts & Sciences and Business.

The perceived lack of understanding and knowledge about accommodations by university staff manifests itself in three different ways: (a) students with disabilities encounter tremendous difficulty in requesting and obtaining accommodations; (b) faculty are unwilling to accommodate the student; and (c) faculty question the fairness and appropriateness of providing accommodations in the first place. Studies have discovered that the provision of accommodations triggers issues related to equity (Denny & Carson, 1994; Nelson, Dodd & Smith, 1990; Tucker, 1996; Williams & Ceci, 1999). Students with disabilities reported feelings of social isolation, ostracism, or scorn from instructors and other students “either because of their disability or because they requested accommodations to which other students were not entitled” (West et al., 1993, p. 462). Both faculty and students without disabilities are concerned that the provision of accommodations would give students an unfair advantage thereby, creating inequity in the classroom. Some argue that accommodations are nothing more than a wish list for students with disabilities since there is no scientifically justifiable method for identifying an accommodation (Williams & Ceci, 1999). Such concerns combined with limited understanding and knowledge can have devastating consequences for students with disabilities.

*Attitude.* The attitudes of administrators, faculty, staff, and other students largely determine the institutional climate and consequently its policies, procedures, and practices. As long as professors harbor the same prejudices against individuals with disabilities as the rest of society, students with disabilities will encounter difficulties

succeeding in postsecondary education (Fitchen, Amsel, Courdon, & Creti, 1988). Fortunately, some studies have found that the university community generally have positive attitudes toward students with disabilities (Askamit, Morris, & Leuenberger, 1987; Fitchen et al., 1990; Fonosch & Schwab, 1981).

Askamit, Morris, and Leuenberger (1987) surveyed 51 student service personnel and 717 faculty to assess their attitudes and knowledge regarding students with disabilities. Over half of the respondents (52%) were in their jobs for more than 10 years. Eleven items on the survey constituted an attitude subscale. Participants responded to each item using a Likert scale ranging from strongly disagree (1) to strongly agree (6). Possible scores on the scale ranged from a minimum of 11 (least positive) to a maximum of 66 (most positive). The average total score for faculty was 45.50. Student service personnel scored significantly higher than faculty with an average total score of 51.31. Significant main effects on attitude were noted for the variables of gender, years of experience, previous contact, and presence of information. Faculty who had prior contact with students with disabilities, had less than 10 years on the job, had access to information, and were female scored highest on the attitude scale. Overall, the findings suggest respondents in this study had generally positive attitudes toward students with disabilities.

Fonosch and Schwab (1981) surveyed 800 full-time faculty from two midwestern universities to determine their attitudes toward students with disabilities. The survey was comprised of two Likert Scales to measure attitude. The Attitude Toward Disabled Persons (ATDP) scale measured whether respondents viewed themselves as essentially different or similar to persons with disabilities. The Attitude Toward Treatment of

Disabled Students (ATTDS) assessed respondents' attitudes regarding the treatment of students with disabilities in the classroom.

Results showed that females, faculty who had more contact with students with disabilities, and associate and assistant professors scored higher on the Attitude Toward Disabled Persons (ATDP) scale than males, faculty with less contact, and professors and instructors. The Attitude Toward Treatment of Disabled Students (ATTDS) scale revealed that faculty generally had positive attitudes toward including students with disabilities in academia. Respondents were also receptive to accommodating students in the classroom. Significant differences were again observed for specific groups. Scores for education faculty were significantly higher than scores for engineering and natural sciences faculty. Similarly, faculty from social sciences scored significantly higher than faculty from engineering. Faculty who had prior contact with persons with disabilities also scored higher than faculty with no contact. Fonosch and Schwab (1981) concluded that faculty held positive attitudes toward students with disabilities. In particular, factors such as prior contact with persons with disabilities, experience teaching students with disabilities, and field of expertise could affect faculty's attitude.

MacLean and Gannon (1997) also utilized the Attitude Towards Disabled Persons (ATDP) scale to determine attitude toward students with emotional disabilities. The instrument included an Interaction with Disabled Persons scale (IDPS) which measured the respondent's comfort level in the presence of and interaction with people with disabilities. Twenty-one administrators and 49 academic staff participated in this study along with 336 students from a rural university in New South Wales. While academic staff scored higher on the Attitude Towards Disabled Persons (ATDP) scale than

students, there was no significant difference. On the Interaction with Disabled Persons (IDPS) scale, academic staff were significantly more comfortable than students with individuals with disabilities. Females in this study held more positive attitudes than males, which support the Fonosch and Schwab (1981) finding. MacLean and Gannon (1997) concluded that the university community held more positive attitudes toward disability than the general population. “On the other hand, all of the support suggested to the respondents was perceived as being not necessary for the student” (p. 226). This contradiction demonstrates that a positive attitude does not necessarily mean faculty will accommodate students with emotional disabilities.

Collectively these three studies (Askamit, Morris, & Leuenberger, 1987; Fonosch & Schwab, 1981; MacLean & Gannon, 1997) demonstrate that faculty express positive attitudes towards students with disabilities. However, results from other studies regarding the reluctance of faculty to provide accommodations (Aune, 1995; Satcher, 1992; Williams & Ceci, 1999) and the perception of students with disabilities regarding their experience (Kruse, Elacqua, & Rapaport, 1998; NCSPEs, 2000; West et al., 1993) contradict the positive attitude reported by faculty. Examining the interactions between students with disabilities and faculty may provide clarity regarding faculty’s behavior and whether the behavior reflects a positive attitude.

Fitchen, Amsel, Bourdon, and Creti (1988) investigated the nature of interactions between college students with physical disabilities and their professors. Participants included 74 professors recommended by students with disabilities, 17 professors with no experience teaching students with disabilities, and 34 students with physical disabilities. Survey results revealed the experienced professors were more willing to teach students

with disabilities than the inexperienced professors. Likewise, the experienced professors were significantly more comfortable with this student population than the inexperienced professors. “Generally appropriate behaviors by both professors and students were more common than inappropriate behaviors and professors and students agreed on the nature of appropriate and inappropriate behavior by both groups” (Fitchen, Amsel, Bourdon, & Creti, 1988, p. 17). While the results reflect a positive relationship between students with disabilities and faculty, the study has a few limitations. These limitations include the small sample of inexperienced professors and the fact that samples were not randomly selected. These results may be due to chance factors and not representative of the population. Houck, Asselin, Troutman, and Arrington (1992) conducted a similar study without the limitations of the Fitchen et al. (1988) study.

Houck et al. (1992) conducted a study with a more proportionate representation of inexperienced and experienced faculty. A random sample of 108 instructional faculty from a 4-year university participated in a study investigating faculty and students’ perceptions regarding the university environment for students with learning disabilities. Only 43% of the faculty respondents reported having a student with a learning disability in the classroom. Significant differences between the perceptions of students and faculty on accommodations and expectations were recorded. Faculty felt they were more willing to allow accommodations than students perceived them to be. Students had higher academic expectations for themselves than faculty in terms of degree completion and selection of major. Faculty’s greatest concern regarding teaching students with learning disabilities were: (a) being unaware of student in the class; (b) issue of fairness to other students when making accommodations; (c) the student not understanding the class

materials; and (d) extra time needed to instruct the student. Students' greatest concerns were: (a) lack of understanding by others; (b) other students' lack of understanding about accommodations; and (c) reluctance of professors to provide accommodations. The discrepancy between students' and faculty's responses indicate that faculty's perception regarding students with disabilities may be more positive than their actual behavior.

The contradiction between perception and behavior is also supported by MacLean & Gannon (1997) who uncovered other studies in which faculty's reported attitude towards disabilities was more positive than the actual behavior. Houck et al. (1992) suggested that faculty's perceptions and attitude may be negatively influenced by students' disabilities. "Whether conscious or unconscious, misconceptions or prejudicial attitudes may create barriers to the pursuit of certain careers or result in unequal opportunities" (Houck et al., 1992, p. 683). These misconceptions or prejudicial attitudes, however, may be eliminated, or at the very least reduced, if faculty initiated some dialogue with students.

Fitchen, Goodrick, Tagalakakis, Amsel, and Libman (1990) explored faculty's comfort level with initiating dialogue with students with disabilities. The authors found that professors were initially dismayed when discovering a student with a disability in their classroom. Similar to the Houck et al. (1992) study, professors were concerned about the additional time required to teach the student as well as the impact the student would have on the rest of the class. Professors also reported concerns about their own ability to teach the student with a disability. The professors in this study, however, were unique in that most initiated dialogue with the student. Professors felt better about teaching students with disabilities after talking to them. Likewise, the students with



disabilities felt more positive about their learning experience due to the active role the professors took in discussing problems and strategies to facilitate student success.

Findings from Fitchen et al. (1990) suggest that “open and honest communication between professors and students is the most effective way to resolve teaching and learning problems and get on with the work of educating all students in the most effective way possible” (p. 124). Open and honest communication between professors and students requires that professors feel a certain degree of comfort in interacting with students with disabilities. Yet professors are still uncomfortable about interacting with students who have disabilities, particularly if the professor has no prior experience teaching students with disabilities (Fitchen et al., 1988, 1990). Strategies for alleviating the discomfort experienced by faculty, administrators, and staff regarding students with disabilities may involve training and information dissemination on disability related topics.

#### *Disability Training for Administrators, Faculty, and Staff*

Students with disabilities have vocalized concrete recommendations to improve their situation in the nation’s colleges and universities. According to student perceptions, the higher education community needs to be:

- (a) better informed about services provided for students with disabilities (Denny & Carson, 1994; Kruse, Elacqua, & Rapaport, 1998);
  - (b) more active in educating instructors about disability in order to dispel myths and stereotypes (Kruse, Elacqua, & Rapaport, 1998; West et al., 1993);
  - (c) more aware of and responsive to students with disabilities (Aune et al., 1995);
- and

(d) better educated about the needs and rights of students with disabilities (NCSPEs, 2000; West et al., 1993).

Other studies, including those that focused on the experiences of higher education personnel, recognized the need for more faculty, staff, and administrator training on the needs of students with disabilities (Nelson, Dodd, & Smith, 1990; Satcher, 1992). In particular training must focus on reasonable and appropriate accommodations that will not negatively affect the integrity of the curriculum and program (Aune, 1995; Enright, Conyers, & Syzmanski, 1996; Lewis & Farris, 1999; Mellard, Hall, & Parker, 1999; Thompson, Bethea, & Turner, 1997). The academic experience for students with disabilities “may be less than adequate if faculty are not prepared to meet [their] accommodation needs” (Satcher, 1992, p. 522). Faculty, administrator, and staff training is critical in light of the continued difficulty experienced by students with disabilities in obtaining accommodations.

The Department of Education has sponsored a number of efforts to provide training on disability for the higher education community. In 1999-2002, the Office of Postsecondary Education funded 21 projects nationwide to enhance the postsecondary education of students with disabilities through disability training for administrators and faculty. Most of the 21 funded projects included activities to assess the training needs of faculty and administrators.

One project (University of Arkansas at Little Rock, 2000) surveyed faculty regarding their perceptions about student disability supports. The survey instrument was adapted from Baggett (1994) and disseminated to 900 faculty. One hundred sixty nine surveys were returned for a response rate of 18%. Data indicated that the respondents

were most familiar with the admissions process for students with disabilities and Section 504 of the Rehabilitation Act of 1973. On the other hand, respondents were least familiar with the accommodations process, student disability support services, and the Americans with Disabilities Act of 1990. Despite the low familiarity with the accommodations process, the majority of the respondents were generally supportive about the provision of accommodations in the classroom. The actual practice of providing accommodations however was questionable as 69% felt students with disabilities in the classroom negatively affected the quality of education received by the other students. Initial survey results suggested more training focused on accommodations be provided for faculty. Less than 42% of the respondents participated in prior professional development or training activities on disabilities. Other formats or venues should be considered to inform and educate faculty about teaching students with disabilities.

San Diego State University (2000) adapted the University of Arkansas at Little Rock (2000) instrument and disseminated it to 162 administrators, faculty, and Disabled Students Programs and Services (DSPS) staff. Of the 162 surveys, 85 (53%) were completed and returned. The DSPS staff and administrators were asked to rate the importance of administrators being informed about 11 policies, procedures, and services for accommodating students with disabilities in their institution. For administrators, the top three areas they needed to be knowledgeable about were successful accommodation models, the Vocational Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990. The DSPS staff, on the other hand, felt administrators needed to be more knowledgeable about the institution's commitment to barrier-free access, the Americans with Disabilities Act of 1990, and student disability support services.

A significant difference between the administrator and DSPS groups were observed for 10 of the 11 items. In each instance of statistically significant difference, the DSPS group placed a higher priority on need than did the campus administrator group. The one area in which the two groups' opinions did not differ significantly was the need for administrators to have information about successful models of accommodation. Of all 11 policies, procedures, and services, this was the issue ranked highest in importance when combining both administrator and DSPS scores.

The DSPS responses were also compared to faculty responses regarding the same 11 policies, procedures, and services. The highest rated area which faculty felt they needed to be knowledgeable about involved successful accommodation models; whereas, the highest rated area DSPS staff felt faculty needed to be knowledgeable about was the accommodation process. Significant differences between faculty and DSPS responses were observed for 8 of the 11 items. In each case of statistical significance the DSPS group again expressed a higher level of perceived need than faculty.

The reported discrepancies between the administrators, faculty, and DSPS perceptions reflect the need for a shared vision regarding students with disabilities. A vision or goal can help clarify and define how institutions respond to the diverse and unique needs of students with disabilities. Such a vision entails the leadership of informed administrators.

#### *Administrator Roles and Priorities*

College and university administrators play a key role in shaping the culture of their institutions. "They are expected simultaneously to provide intellectual leadership, embody institutional values, and shape institutional policy" (Ross & Green, 2000, p. 3).

In this respect, administrators are critical players in ensuring their institutions are physically and programmatically accessible to students with disabilities. As noted throughout the review of literature, the influx of students with disabilities in U.S. colleges and universities are posing ongoing challenges and opportunities for institutions. More research specifically focused on administrators' roles and leadership in addressing these challenges is needed.

One study conducted by Jacobs and Jacobs (1984) involved a sample size of 40 administrators. The purpose of the study was to examine the administrators' knowledge of Section 504 and administrative practices relative to Section 504. Utilizing the Solomon Four Group design, the experimental groups received a two-hour training on Section 504. Results revealed a significant negative relationship between the number of years as an administrator and corresponding knowledge of Section 504. Newer administrators were more inclined to stay abreast of policies and legislation to further their careers while "older administrators may continue to operate under old policies " (p. 465). To assess administrative practice, faculty were surveyed with a 56% return rate. "On practices related to students [with disabilities], 50% of those returning surveys indicated their chairpersons discussed and/or had implemented policies" (p. 464). The authors proposed that the more knowledgeable administrators are about Section 504, the more likely they are to actively implement its mandates. Based on the findings of Jacobs and Jacobs (1984), administrators need more training on the requirements of Section 504 in order to realize its full intent.

Baggett (1994) conducted a study that included interviews with 11 deans, department heads, and other administrators at the University of Massachusetts at

Amherst. While the author cited the limitation in drawing general conclusions from the interviews, conclusions were drawn “based upon data that reflected the opinions or experiences of the majority of the participants” (Baggett, 1994, p. 13). According to these conclusions, administrators felt they understood the issues related to providing accommodations. The administrators also felt there was no need for faculty training in disability awareness. The perceived lack of need for training was also related to the administrators’ indication that nothing was being done to increase the knowledge of faculty about students needs. The perceptions of the administrators in the Baggett (1994) study contradict other studies that report faculty’s lack of knowledge about the provision of accommodations and the need for faculty and administrator training regarding students with disabilities (Aune et al., 1995; Houck et al., 1992; Jacobs & Jacobs, 1984; Kruse, Elacqua, & Rapaport, 1998; McCarthy & Campbell, 1993; Ryan, 1993; Thompson, Bethea, & Turner, 1997; West et al., 1993). Baggett’s (1994) findings may be an indication of the low priority administrators place on disability related issues.

Wolverton, Montez, and Gmelch (2000) asked 1,370 deans from 360 institutions what they felt were the three greatest challenges in the next three to five years. The top three challenges identified were fiscal (allocation and utilization of resources), administration (long-range planning, legislative accountability), and curriculum/program development (student recruitment and retention). These challenges may represent numerous implications for students with disabilities. In particular the area of student recruitment should encompass outreach to individuals with disabilities as an untapped source of potential students. The area of retention should also recognize the importance of accommodations to facilitating educational success for students with disabilities. The

specific focus on disability, however, may be lost since less than 2% of administrators in the Wolverton et al. (2000) study felt ensuring the diversity of faculty and students was a challenge.

Ross and Green (2000) surveyed 2,380 college presidents to determine their top duties and responsibilities. The top three responsibilities identified were in the areas of planning, fundraising, and personnel. These responsibilities would impact students with disabilities. For example, responsibilities to personnel should involve training to increase faculty's knowledge about teaching students with disabilities. The need for personnel training is linked to the institution's responsibilities to its students. However, responsibilities related to student issues were identified by only 11% of the respondents in the study (Ross & Green, 2000).

The Wolverton et al. (2000) and Ross and Green (2000) studies did not include any reference to disability. However, the low priority on diversity for college deans and student issues for college presidents may be an indication of the importance of disability in the priorities and responsibilities of college administrators. Clearly administrators are confronted with competing priorities in an already full agenda. Yet, institutions of higher education cannot afford to overlook or minimize the issues students with disabilities continue to confront on college and university campuses.

According to Toma and Palm (1998), "The academic administrator must develop the skills needed to recognize the legal issues that invariably shape the policies and decisions made in a school or department. And deans and chairs must understand the resources available to assist them in resolving these issues" (p. iii). While the statement refers to deans and chairs, it is also pertinent to other administrators in higher education

including presidents, provosts, vice presidents of faculty affairs, and vice presidents of student affairs. Not only are administrators responsible for ensuring legal mandates are met, but they also have tremendous responsibility for shaping the culture of the institution.

It is essential that administrators provide leadership in advancing the quality of educational opportunities for students with disabilities if faculty and staff are to respond appropriately and effectively to the needs of this student population. Administrators must demonstrate more knowledge and understanding about issues related to students with disabilities and translate this knowledge to appropriate policies and practices.

The increasing presence of students with disabilities on college and university campuses presents not only a challenge, but an opportunity for administrators. Administrators now have an opportunity to establish institutions that are responsive to students from diverse backgrounds and varied learning styles. Assuming a leadership role in meeting this challenge and taking this opportunity requires knowledge about:

- disability legislation (Baggett, 1994; Jacobs & Jacobs, 1984; Thompson, Bethea, & Turner, 1997);
- accommodations for students with disabilities (Nelson, Dodd, & Smith, 1990; Satcher, 1992);
- rights and responsibilities of students and institutions (Getzel, Stodden, & Briel, 2001; Mellard, Hall, & Parker 1999; Rothstein 1998).

### *Summary*

Research focused on higher education administrators regarding the postsecondary education of students with disabilities is limited. Further studies are essential to clarify



the administrators' role and identify gaps in their knowledge regarding disability. This study investigated how informed administrators are about disability legislation, accommodations, and responsibilities; their professional and personal experience with individuals with disabilities; and their perceptions about the information and resources needed to enhance their college's responsiveness to students with disabilities. The resulting data may provide insight into how to better engage higher education administrators in a proactive effort supporting the recruitment, retention, and graduation of students with disabilities.

## Chapter 3

### Methodology

The purpose of this study was to investigate the knowledge and information administrators currently possess and need to effectively and appropriately respond to challenges encountered by students with disabilities in higher education settings. The variables investigated included administrators': (a) knowledge about their college's responsibilities and accommodation processes related to students with disabilities; (b) perceptions regarding training needs in areas related to students with disabilities; and (c) personal and professional experience with disability. The relationship between these three variables was examined. Administrators' responses regarding knowledge, training, and experience were also compared to responses from DSPS staff.

A quantitative survey instrument was used to assess the three variables of knowledge, training needs, and prior experience. Surveying enables the researcher to gather information about people's ideas, feelings, and background (Fink & Kosecoff, 1998). Fink and Kosecoff (1998) cite three reasons for conducting surveys – policy or program planning, program evaluation, and research. The primary reason for utilizing a survey in this study was to collect data (research) from administrators and DSPS staff as it relates to students with disabilities.

Currently, the research base on higher education administrators regarding students with disabilities is limited. The data collected in this study contributes to the existing research and may establish a baseline for further studies. The data collected also

provides ideas toward the development of disability training programs for administrators in institutions of higher education. Thus, the utilization of survey research in this specific study was appropriate and yielded data that effectively addressed the research questions.

### *Research Questions*

1. How informed are college administrators and Disabled Students Programs and Services staff regarding the responsibilities of various academic and community representatives to students with disabilities as mandated by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act?
  - a. What knowledge do administrators and Disabled Students Programs and Services staff possess regarding services and supports mandated under Section 504 and the Americans with Disabilities Act?
  - b. Is there a difference between the knowledge of administrators and Disabled Students Programs and Services staff regarding services and supports for students with disabilities?
2. How much personal and professional experience do administrators have with individuals with disabilities and how much training and resources have they accessed?
  - a. Is there a significant relationship between administrators' experience and level of involvement with individuals with disabilities and their reported knowledge regarding services and supports for students with disabilities?
  - b. Is there a significant relationship between administrators' level of participation in disability training opportunities and their knowledge regarding services and supports for students with disabilities?

- c. Is there a significant relationship between administrators' utilization of disability resources and their knowledge regarding services and supports for students with disabilities?
- 3. What information do administrators and Disabled Students Programs and Services staff perceive higher education administrators need to lead efforts towards enhancing colleges' responsiveness to postsecondary students with disabilities?
  - a. Is there a significant difference between administrators' and Disabled Students Programs and Services staff's perceptions regarding information administrators need to meet the needs of students with disabilities?
  - b. Is there a significant relationship between administrators' perceived need for information and their current knowledge regarding services and support for students with disabilities?
  - c. Is there a significant relationship between administrators' perceived need for more information and their personal and professional experience with disability?

### *Sample and Population*

Subjects for this study were selected from California Community Colleges. The California Community College system of two-year public institutions is composed of 108 colleges statewide and serves over 2.5 million students, representing the largest system of higher education in the world. This study focused on the California Community Colleges because students with disabilities enroll in two-year institutions at a higher rate than in four-year institutions (Fairweather & Shaver, 1990; Satcher, 1992; Vogel et al., 1998).

The sample for this study consisted of administrators and Disabled Students Programs and Services (DSPS) staff from the 108 community colleges in California. Administrator was defined as college president, vice president of faculty affairs, vice president of student affairs, dean, or associate dean. The DSPS staff was defined as coordinator or counselor currently working in a college office providing programs and services for students with disabilities.

### *Design of the Survey Instrument*

*Variables.* The three variables assessed in this study were knowledge, training needs, and prior experience with disability:

Knowledge. Respondents' knowledge about: (a) responsibilities of various individuals as it pertains to students with disabilities and (b) process for accommodating students with disabilities was measured. Items included in the knowledge section of the instrument were derived from Section 504 of the Rehabilitation Act of 1973, the ADA of 1990, and Supreme Court and Office of Civil Rights rulings.

Perception regarding training needs. Respondents' perceived need for more information in four categories was assessed. The four categories were: (a) policies; (b) programs and services; (c) legislation and court rulings; and (d) accommodations. Moreover, respondents' past use and future interest in utilizing various resources to learn more about students with disabilities and related issues were assessed.

Personal and professional experience with disability. Respondents' experience with disability was based on: (a) their direct involvement with students with specific disabilities; (b) their self-identification as a person with a disability; and (c) whether or not there was a significant other (family, friend) in their lives who had a disability.

*Instrumentation.* Assessment of the three variables (knowledge, perception regarding training needs, prior experience with disability) was accomplished through the dissemination of two versions of a quantitative survey instrument. One version was designed for administrators and the second version was designed for Disabled Students Programs and Services staff (refer to Appendix A). Sources of measurement error in survey research, which may bias the respondent, involve the way questions are worded or the order in which questions are asked (Sudman, Bradburn, & Schwarz, 1996). The primary concern in the design of any instrument is its reliability and validity. One strategy for ensuring an instrument's reliability and validity is to base the survey on one that has already been developed and tested (Fink & Kosecoff, 1998). The survey used in this study was based on instruments developed by Baggett (1994), University of Arkansas at Little Rock (2000), and San Diego State University (2000).

Baggett's (1994) instrument was designed to assess faculty's knowledge of disabilities, experience teaching students with disabilities, and their attitudes towards students with disabilities. The survey consisted of questions concerning respondents': a) demographics; b) experience teaching students with disabilities; c) knowledge of student services at the university; d) knowledge of legislation and litigation; e) perceptions regarding usefulness of resources on disability; and f) attitudes towards disabilities. Questions were presented as checklists, Yes - No format, four point Likert scale (ranging from very familiar to very unfamiliar), or five point Likert scale (ranging from strongly agree to strongly disagree).

The University of Arkansas at Little Rock (2000) adapted the Baggett (1994) to develop a faculty survey focused on student disability support. Like Baggett, the

University of Arkansas survey included questions concerning respondents': (a) experience teaching students with disabilities by type of disability; (b) familiarity with university services, disability legislation, and educational litigation utilizing a five point Likert scale ranging from very familiar to very unfamiliar; (c) likelihood of using resources to learn more about accommodating students utilizing a forced choice format of likely – unlikely; and (d) attitude towards disability utilizing a four point Likert scale ranging from strongly agree to strongly disagree. The University of Arkansas included additional questions about respondents': (a) personal experience with an individual with disability utilizing a Yes – No format; (b) participation in disability training utilizing a Yes-No format; (c) knowledge about who is responsible for processes associated with supporting students with disabilities utilizing a checklist format; and (d) actions if a student with a disability enrolled in their class utilizing a forced choice format of likely – unlikely.

San Diego State University (2000) adapted the University of Arkansas at Little Rock (2000) survey and developed three versions for respondents representing faculty, administrators, and counselors for students with disabilities. The San Diego State University instrument was designed to assess the perceptions of respondents regarding training needs to accommodate students with disabilities in the campus environment. Modifications to the instrument included asking respondents to indicate on a five point Likert scale of strongly agree to strongly disagree their interest in obtaining more information about university services, disability legislation, and educational litigation. The Baggett (1994) and University of Arkansas (2000) instrument inquired about respondents' familiarity with these services, legislation, and litigation. The administrator

version added a question regarding respondents' interest in obtaining information about accommodating students with disabilities to participate in campus activities and services. The University of Arkansas (2000) question regarding whether or not respondents participated in disability training was expanded and used a five point scale using the following categories: unaware of training; aware, did not attend; attended, not valuable; attended, very valuable; and personally involved in development and presentation of training. Similarly, the question regarding resources to learn more about accommodating students was expanded and required respondents to indicate: a) past use of the resource and its value; b) interest in using the resource in the future; and c) whether they could provide valuable input regarding the resource. A preliminary analysis of internal consistency reliability yielded Kuder-Richardson 20 Coefficient Alpha scores of  $r = .9244$  on Question 10 of the Director survey and Question 9 of the Administrator survey. For Questions 11 on the Director and 10 of the Administrator survey a Coefficient Alpha score of  $r = .9147$  was obtained. The Coefficient Alpha scores suggest a highly reliable instrument in terms of internal consistency.

The current study utilized the administrator and Disabled Students Programs and Services surveys (San Diego State University, 2000) with some modifications. First, to obtain more information regarding respondents' experience with disability two questions were added. These questions inquired about the number of students with disabilities with whom respondents have had direct involvement and their level of involvement with family or friends with disabilities. Second, the question regarding participation in disability training distinguished between information received at staff meetings and formal workshops. The response, 'no training has occurred,' was also added. Third, the



response ‘does not exist on campus’ was added to the question regarding resources. Approval for the instrument was obtained from the Institutional Review Board at the University of San Diego.

*Survey.* Both versions of the survey were divided into four parts: 1) demographics; 2) current knowledge; 3) perceived need for more information; and 4) prior and intended use of resources. The Disabled Students Programs and Services (DSPS) version differed from the Administrator version in that DSPS respondents responded to selected items based on what they perceived was important information for administrators to possess. Table 1 delineates the survey parts, associated research questions, data collected, response format, and range of scores.

#### *Data Collection*

Support for the study was obtained from the California Association of Postsecondary Education and Disability (CAPED) and the California Community College Chancellor’s Office (Appendix B). The research protocol and instrument were reviewed and approved by the Institutional Review Board (IRB) at the University of San Diego prior to dissemination of the surveys. Disabled Students Programs and Services coordinators at each college were contacted to participate in this study and to assist in the dissemination of the instruments on their respective campuses. Survey packets were mailed directly to DSPS coordinators at the 108 California Community Colleges.

The packet mailed to the coordinators included instructions (Appendix C) for dissemination, three Administrator surveys, and three DSPS surveys. Each survey was accompanied with a cover letter (Appendix D) indicating the nature of the study along with an endorsement from the California Association of Postsecondary Education and

Table 1

*Outline of survey parts according to research questions and data collected*

Part	Rsch.		Response	Score
#	Quest.	Data Collected	Format	Range
I	2	Personal and professional experience with disability:		0 - 48
		▪ Number of students with disabilities respondent directly involved with	Multiple choice	
		▪ Whether respondent has a disability	Yes – No	
		▪ Whether respondent has a significant other with a disability	Yes – No	
		▪ Degree of interaction with significant other about disability	Multiple choice	
II	1	Respondents current knowledge regarding:		0 - 61
		▪ Responsibilities to students with disabilities	Checklist	
II	1	▪ Accommodating students with disabilities	Yes - No	
III	3	Perceived need for more information regarding:	Likert Scale	12 – 60
		▪ Policies		
		▪ Programs and services		
		▪ Legislation and litigation		
		▪ Accommodations		

Table 1 (continued)

Part	Rsch.		Response	Score
#	Quest.	Data Collected	Format	Range
III	3	Perceived need for more information about accommodating students in eight areas: <ul style="list-style-type: none"> <li>▪ Outreach/recruitment</li> <li>▪ Athletics</li> <li>▪ Library</li> <li>▪ Campus clubs</li> <li>▪ Academics</li> <li>▪ Financial aid</li> <li>▪ Housing</li> <li>▪ Physical accessibility of campus</li> </ul>	Likert Scale	0 – 61
IV	2 - 3	Respondents' prior and intended use of resources to increase knowledge about accommodating students with disabilities: <ul style="list-style-type: none"> <li>▪ Level of participation in training</li> <li>▪ Past use and perceived value of resources</li> <li>▪ Intention to use resource in the future</li> </ul>	Likert Scale	0 – 40 0 – 36 0 - 36

Disability and the Chancellor's office. The cover letter emphasized that completion of the survey was voluntary and all responses would remain anonymous. A self-addressed, stamped envelope was attached to each survey with a request to return the completed instrument within two weeks.

Respondents were also asked to complete a letter of consent (Appendix E) to participate in the study. Consent forms were returned in a second self-addressed stamped envelope. The provision of a separate envelope for the consent form was to ensure the respondent's identity could not be linked to his/her completed survey.

Disabled Students Programs and Services (DSPS) coordinators were instructed to distribute the surveys to the President and two other campus administrators, which may include the Vice President of Faculty Affairs, Vice President of Student Affairs, Deans, or Associate Deans. The projected sample size for administrators was 324. Each DSPS coordinator from the 108 community colleges also completed a survey. This segment of the sample represented a finite population in that all Disabled Students Programs and Services (DSPS) coordinators from the 108 colleges were surveyed. Coordinators also disseminated the surveys to two other counselors in their office. The projected sample size for DSPS staff was 324.

Each DSPS coordinator was contacted via e-mail or phone one month after the initial mailing. The purpose of the follow-up was to inquire if all surveys were distributed and to remind coordinators to return their completed surveys if they had not yet responded.

Completed surveys were mailed directly to the investigator and stored in a locked file cabinet. The investigator was the only person with access to the file cabinet. Surveys will be kept for five years after which time they will be shredded.

### *Data Analysis*

Analysis of the data according to the research questions is described below. A delineation of the scoring system for each survey question and corresponding statistical analysis is also provided in Appendix F.

*Research Question #1.* How informed are college administrators and Disabled Students Programs and Services staff regarding the responsibilities of various academic and community representatives to students with disabilities as mandated by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act?

*1a.* What knowledge do administrators and Disabled Students Programs and Services staff possess regarding services and supports mandated under Section 504 and the Americans with Disabilities Act?

Responses to *Administrator Survey* questions #7-8 and *Disabled Students Programs and Services Survey* questions #8-9 were used to address research questions #1 and 1a. Each correct response was allotted one point. A maximum total of 61 points indicated high knowledge regarding responsibilities to students with disabilities. Summed scores for each respondent were used to calculate the mean score for each group (Administrator, Disabled Students Programs and Services).

*1b.* Is there a difference between the knowledge profiles of administrators and Disabled Students Programs and Services staff regarding services and supports for students with disabilities?

Analysis of variance (ANOVA) was used to test the difference between Administrator and DSPS mean scores. Analysis of covariance (ANCOVA) was used to

adjust for pre-existing difference between groups including prior experience with disability and years of experience in higher education.

*Research Question #2.* How much personal and professional experience do administrators have with individuals with disabilities and how much training and resources have they accessed?

Responses to *Administrator Survey* questions #3-6 indicated degree of experience with disability based on number of students with disabilities, whether respondent had a disability, whether respondent had a significant other with a disability, and level of involvement with significant other. Questions #11-12 indicated level of participation in prior training and utilization of existing resources in the area of disability. Respondents were also asked to rate the value of the training and resources they accessed. Scores for each respondent were summed and a group mean score was calculated.

2a. Is there a significant relationship between administrators' experience and level of involvement with individuals with disabilities and their reported knowledge regarding services and supports for students with disabilities?

Scores for prior experience with disability, *Administrator Survey* questions # 3 - 6, were compared to knowledge scores, *Administrator Survey* questions #7-8. A correlation coefficient was calculated to address research question #2a.

2b. Is there a significant relationship between administrators' level of participation in disability training opportunities and their knowledge regarding services and supports for students with disabilities?

Scores for training participation, *Administrator Survey* question # 11, was compared to knowledge scores, *Administrator Survey* questions #7-8. A correlation coefficient was calculated to address research question #2b.

2c. Is there a significant relationship between administrators' utilization of disability resources and their knowledge regarding services and supports for students with disabilities?

Scores for resource utilization, *Administrator Survey* question # 12, was compared to knowledge scores, *Administrator Survey* questions #7-8. A correlation coefficient was calculated to address research question #2c.

*Research Question #3.* What information do administrators and Disabled Students Programs and Services staff perceive higher education administrators need to lead efforts towards enhancing colleges' responsiveness to postsecondary students with disabilities?

Responses to questions #9 – 10 and #13 on the *Administrator Survey* and #10 – 11 and #12 on the *Disabled Students Programs and Services Survey* were used to address research question #3. Mean scores were calculated for each item and used to rank the items from highest to lowest need.

3a. Is there a significant difference between administrators and Disabled Students Programs and Services staff's perceptions regarding information administrators need to meet the needs of students with disabilities?

Mean scores for each group (Administrator, Disabled Students Programs and Services) were calculated. Analysis of variance (ANOVA) was used to test the difference between Administrator and DSPS mean scores.

3b. Is there a significant relationship between administrators' perceived need for information and their current knowledge regarding services and support for students with disabilities?

Scores on perceived need, *Administrator Survey* questions #9 – 10 and # 13, were compared to knowledge scores, *Administrator Survey* questions #7-8. A correlation coefficient was calculated to address research question #3b.

3c. Is there a significant relationship between administrators' perceived need for more information and their personal and professional experience with disability?

Scores for prior experience with disability, *Administrator Survey* questions # 3 - 6, were compared to need scores, *Administrator Survey* questions #9 – 10 and #13. A correlation coefficient was calculated to address research question #3c.

### *Summary*

Upon completion of the study, results will be presented at the annual conferences for the Association of Higher Education and Disability (AHEAD), the California Association of Postsecondary Education and Disability (CAPED), the Pacific Rim, and the California Community College Chief Instructional Officers. An executive summary of the study will also be disseminated to the California Community College Chancellor's Office, Academic Senate of the California Community Colleges, and the campus offices for Disabled Students Programs and Services.



## Chapter 4

### Analysis of Data

The purpose of this study was to investigate the knowledge and information administrators possessed and needed to effectively and appropriately respond to challenges encountered by students with disabilities in higher education settings. The perceptions of administrators including presidents, vice presidents, deans, associate deans, and chairs were of particular interest given the leadership positions they possess within the postsecondary institution. Following approval from the Institutional Review Board at the University of San Diego, surveys were distributed to administrators representing 108 community colleges throughout California.

The survey included several components: (a) determination of administrators' current knowledge about their institutions' responsibilities to students with disabilities; (b) identification of areas in which administrators needed more information in order to meet the needs of students with disabilities; (c) assessment of administrators' participation in training, utilization of resources, and their perceived value; and (d) description of administrators' personal and professional experience with disability. Disabled Students Programs and Services (DSPS) professionals were also surveyed as a comparison group to determine if there were significant differences in existing knowledge, experience, and perceptions about training and resource needs.

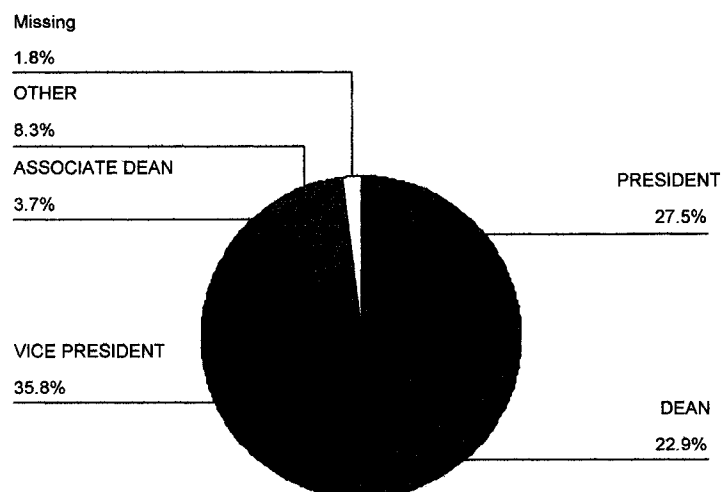
### *Surveys Returned*

Of the 648 instruments mailed, 139 were initially returned to the researcher. A telephone follow-up with all the DSPS coordinators and an email follow-up to two college administrator listservs was initiated one month after the surveys were mailed. The follow-ups resulted in an additional 94 surveys returned. Total surveys returned were 233 for a response rate of 36%. The returned instruments were comprised of 109 administrator surveys and 124 DSPS surveys for a return rate of 34% and 38%, respectively. Based on the consent forms that were returned, 65 colleges participated at some level, representing 60% of the 108 California Community Colleges.

### *Demographic Characteristics*

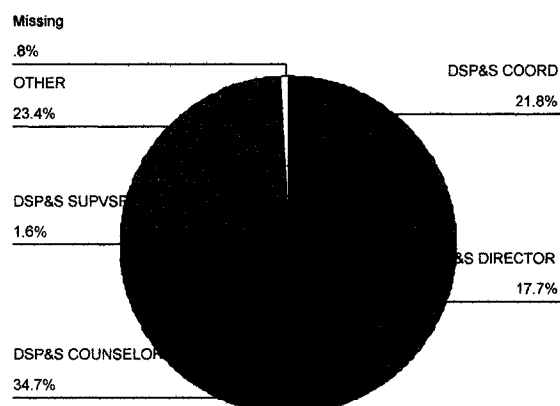
*Administrators.* Of the 109 administrators who participated in the study, 30 were college presidents, which represented 28% of the sample. Vice Presidents (n=39) were the most represented in the sample (36%), followed by 30 presidents (28%), 25 deans (23%), and 4 associate deans (4%). Nine administrators identified as other (2%) and two administrators (9%) did not indicate their rank. The administrative ranks for respondents are depicted in Figure 1. Post-secondary administrative experience ranged from 2 to 41 years, with a mean of 19 years. Presidents and Associate Deans had the most experience with a mean of 24 years. Vice Presidents and Deans reported an average of 17 and 16 years, respectively.

*Disabled Students Programs & Services (DSPS).* Of the 124 DSPS professionals who participated in the study, 49 were coordinators and directors, which represented 40% (22% and 18%, respectively) of the sample. Two supervisors represented 2% and 43



*Figure 1.* Composition of administrator sample according to reported administrative rank.

counselors represented 35% of the sample. Twenty nine DSPS respondents (23%) identified as other and one respondent did not identify their role. The DSPS roles for respondents are illustrated in Figure 2.



*Figure 2.* Composition of Disabled Student Services and Programs (DSPS) staff sample according to reported position.

Experience in DSPS ranged from 1 to 32 years, with a mean of 13 years. Table 2 presents the employment status of DSPS respondents. The DSPS group was predominantly comprised of permanent, long-term staff (i.e., 91% full time, 55% contract, 60% tenure track).

Table 2

*Employment Status of DSPS Respondents*

Employment Status	Count	%
Full Time	113	91
Part-Time	7	6
Contract	68	55
Adjunct	4	3
Tenure Track	74	60
Non-Tenure Track	9	7

*Professional and Personal Experience with Disability.* Experience with students with disabilities was high with 57% of administrators and 97% of DSPS professionals indicating direct involvement with “more than 16 students” during the last four years. The student disability reported most by both administrators and DSPS was physical disability (n=220), followed by learning disability (n=215), and sensory disability (n=206). Only 15 administrators reported having a disability compared to 32 DSPS professionals. Of the 233 respondents, 145 (62%) reported having a family member or friend with a disability. Table 3 presents data on the respondents’ level of involvement with significant others who have a disability. Over 60% of these respondents (28%

administrators and 34% DSPS) were actively involved with individuals with disabilities ranging from discussions about disability-related topics and issues to providing physical and emotional support.

Table 3

*Level of Involvement with Significant Other with a Disability*

Level of Involvement	Admin.	DSPS
No conversations regarding disability	4 (3.7%)	2 (1.6%)
Discussed issues/topics related to disability	10 (9.2%)	13 (10.5%)
Provided physical and/or emotional support	19 (17.4%)	25 (20.2%)
Discussed issues <u>and</u> Provided support	30 (27.5%)	42 (33.9%)

*Research Question 1: How informed are college administrators and DSPS staff regarding the responsibilities of various academic and community representatives to students with disabilities as mandated by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act?*

*1a. What knowledge do administrators and DSPS staff possess regarding services and supports mandated under Section 504 and the Americans with Disabilities Act?* Respondents' knowledge about: (a) responsibilities of various individuals as it pertains to students with disabilities and (b) process for accommodating students with disabilities was measured. College administrators were less informed about the college's responsibilities to students with disabilities than DSPS staff. Specifically, the mean score for administrators was 45 (out of a possible 61 points), with individual scores ranging from 28 to 53. Comparatively, the mean score for DSPS staff was 48 out of 61 points

with individual scores ranging from 38 to 54. Within the administrator group, Vice Presidents and Deans scored higher ( $M = 45$ ) than other administrators (see Table 4).

Table 4

*Mean Scores for Administrators on Knowledge*

Administrative Rank	Mean	N	Std. Deviation
PRESIDENT	44.47	30	5.14
DEAN	45.44	25	5.11
VICE PRESIDENT	45.26	39	4.86
ASSOCIATE DEAN	43.25	4	6.29
OTHER	44.56	9	4.36
Total	44.99	107	4.91

*1b. Is there a difference between the knowledge profiles of administrators and DSPS staff regarding services and supports for students with disabilities?* A one-way ANOVA was conducted to determine if there was a significant difference between administrators and DSPS knowledge scores. The ANOVA yielded an  $F_{1, 232}=29.122, p<.05$ , which indicated a significant difference between administrators and DSPS (Table 5). However, since the assumption of equal population variance was not met, the Kruskal-Wallis test was performed. The Kruskal-Wallis test also revealed a significant difference between administrators and DSPS on the knowledge measurement ( $H=23.543; p=.000$ ).

Table 5

*ANOVA for Administrator and DSPS Knowledge Scores*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	457.247	1	457.247	29.122	.000
Within Groups	3626.951	231	15.701		
Total	4084.197	232			

A one-way ANOVA was conducted to determine if administrators' knowledge scores differed according to position. Testing for equal population variance was not necessary as the data originated from one population. The mean knowledge scores for each administrative position are shown in Table 6. Deans (M=45.44) scored highest followed by Vice Presidents (M=45.26), Presidents (M=44.47), and Associate Deans (M=43.25).

Table 6

*Mean Scores and Range of Scores for Administrators on Knowledge*

Rank	Mean	Minimum	Maximum
PRESIDENT	44.47	31.00	52.00
DEAN	45.44	32.00	52.00
VICE PRESIDENT	45.26	28.00	53.00
ASSOCIATE DEAN	43.25	34.00	48.00
OTHER	44.56	39.00	51.00

The ANOVA (Table 7) yielded an F ratio of .295, which indicated no significant difference between administrative positions on knowledge scores ( $p < .05$ ).

Table 7

*ANOVA for Knowledge Scores of Administrators from Different Ranks*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29.629	4	7.407	.295	.881
Within Groups	2562.035	102	25.118		
Total	2591.664	106			

Analysis of covariance (ANCOVA) was conducted to adjust for pre-existing difference between administrators and DSPS using disability experience and higher education experience as covariates. Higher education experience was measured by the length of time (years) the respondent has worked at the postsecondary level. Disability experience was measured by: (a) the number of students with disabilities the respondent was directly involved with during the last four years; (b) whether respondent had a disability; and (c) whether respondent had a significant other with a disability. Table 8 presents the results of the ANCOVA. A significant difference was observed between respondents who had a significant other with a disability v. respondents without a significant other with a disability ( $F_{1,230}=4.425, p < .05$ ). However, the practical significance of this result must be considered as there is less than a one point difference in scores between respondents with and without a significant other with a disability.



Table 8

*ANCOVA for Administrators & DSPS Knowledge Scores with Disability Experience and Higher Education Experience as Covariates*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	867.618 <sup>a</sup>	20	43.381	2.845	.000
Intercept	55977.858	1	55977.858	3671.112	.000
Admin./DSS (GROUP)	39.421	1	39.421	2.585	.109
Students w/Disabilities (D4)	4.843	4	1.211	.079	.989
Personal Disability (D6)	40.194	1	40.194	2.636	.106
Significant Other (D7)	67.479	1	67.479	4.425	.037
GROUP * D4	29.013	2	14.506	.951	.388
GROUP * D6	4.762	1	4.762	.312	.577
D4 * D6	61.445	3	20.482	1.343	.261
GROUP * D4 * D6	.000	0	.	.	.
GROUP * D7	5.650E-02	1	5.650E-02	.004	.952
D4 * D7	47.509	3	15.836	1.039	.376
GROUP * D4 * D7	.000	0	.	.	.
D6 * D7	3.939	1	3.939	.258	.612
GROUP * D6 * D7	.000	0	.	.	.
D4 * D6 * D7	.000	0	.	.	.
GROUP * D4 * D6 * D7	.000	0	.	.	.
Error	3202.123	210	15.248		
Total	503410.000	231			
Corrected Total	4069.740	230			

<sup>a</sup> R Squared = .213 (Adjusted R Squared = .138)

Analysis of covariance (ANCOVA) was also conducted to adjust for pre-existing difference between administrators from different ranks using disability experience and higher education experience as covariates (Table 9). No significant differences were observed except between administrators with and without disabilities. Administrators with disabilities scored lower on the knowledge variable with a difference of 3.44.

*Research Question 2: How much personal and professional experience do administrators have with individuals with disabilities and how much training and resources have they accessed?*

Administrators' personal and professional experiences with disability were measured by: (a) number of students with disabilities with whom respondents were directly involved; (b) whether or not respondent reported having a disability; (c) whether or not respondent had a family member or friend with a disability; and (d) level of involvement with significant other with a disability. Out of the 109 administrators who participated in the study, 62 (57%) reported having direct involvement with "more than 16 students with disabilities" over the past four years. Figure 3 reports administrators' experience with students with disabilities according to position. Vice Presidents reported the most involvement, with 22 indicating direct involvement with more than 16 students with disabilities. Sixteen deans and 13 presidents reported direct involvement with more than 16 students over the past four years.

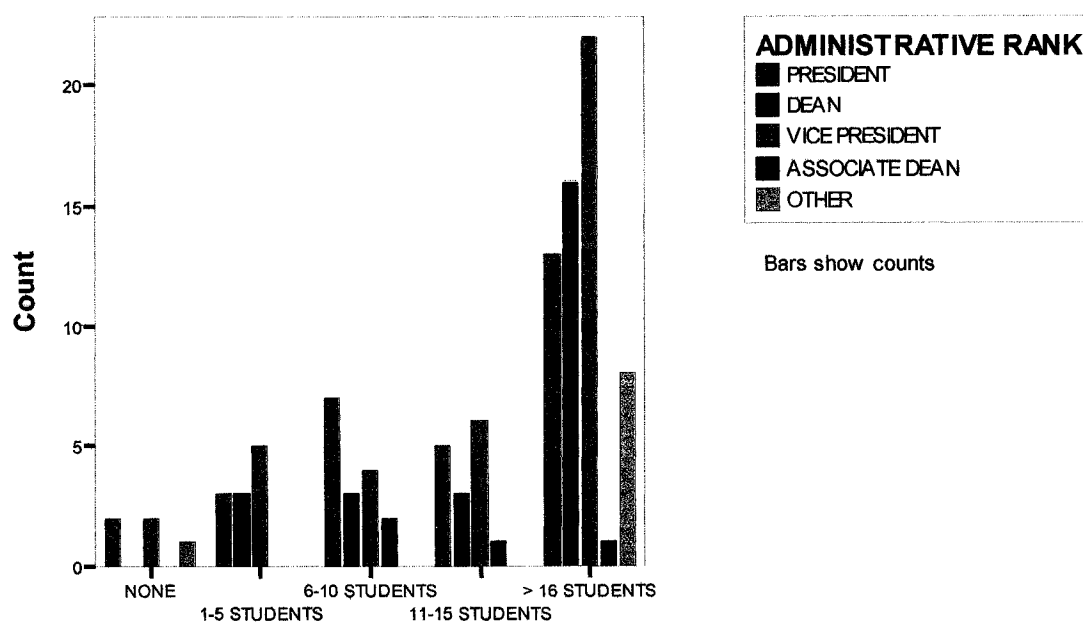
In terms of personal experience, 15 (14%) administrators reported having a disability and 64 (59%) reported having a significant other with a disability. Level of involvement with a family member or friend who had a disability was presented in Table 3.

Table 9

*ANCOVA for Administrators' Knowledge Scores with Disability Experience and Post-secondary Administrative Experience as Covariates*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1048.986 <sup>a</sup>	36	29.138	1.243	.220
Intercept	12343.975	1	12343.975	526.470	.000
Admin. Experience (A2)	30.572	1	30.572	1.304	.258
Admin. Rank (A1)	93.672	4	23.418	.999	.415
Students w/Disabilities (A3)	76.942	4	19.235	.820	.517
Personal Disability (A5)	129.421	1	129.421	5.520	.022
Significant Other (A6)	5.941	1	5.941	.253	.616
A1 * A3	287.912	8	35.989	1.535	.163
A1 * A5	28.459	1	28.459	1.214	.275
A3 * A5	59.594	2	29.797	1.271	.287
A1 * A3 * A5	38.908	2	19.454	.830	.441
A1 * A6	100.236	3	33.412	1.425	.243
A3 * A6	16.352	3	5.451	.232	.873
A1 * A3 * A6	34.564	3	11.521	.491	.689
A5 * A6	.000	0	.	.	.
A1 * A5 * A6	.000	0	.	.	.
A3 * A5 * A6	.000	0	.	.	.
A1 * A3 * A5 * A6	.000	0	.	.	.
Error	1524.034	65	23.447		
Total	208224.000	102			
Corrected Total	2573.020	101			

<sup>a</sup> R Squared = .408 (Adjusted R Squared = .080)



*Figure 3.* Number of students with disabilities administrators have had direct involvement with over the past four years according to administrative rank.

Responses to the five survey items concerning personal and professional experience (questions 3-6) were coded and summed for each respondent resulting in a mean score of 24 out of a possible 48 points.

Administrators also reported their level of participation and utilization of training and resources on disability. In terms of training, administrators indicated their level of participation, which ranged from “no training done” (0 points) to “personally involved in development and training” (5 points). Mean scores for each training were calculated and are reported in Table 10. Training delivered by DSPS professionals at staff meetings were the most attended ( $M=3.36$ ) followed by DSPS sponsored workshops ( $M=2.96$ ).

Table 10

*Level of Administrator Participation in Training*

Trainer	Format	N	Min.	Max.	Mean	Std.
						Deviation
DSPS	Staff Meeting	101	0	5	3.36	1.331
	Workshop	98	0	5	2.96	1.485
Dept./School On campus	Staff Meeting	97	0	5	2.72	1.836
	Workshop	94	0	5	2.36	1.842
Other Group On campus	Staff Meeting	96	0	5	1.81	1.743
	Workshop	91	0	5	1.68	1.699
Other Group Off campus	Staff Meeting	90	0	5	1.83	1.644
	Workshop	96	0	5	1.87	1.656

The least attended training were workshops delivered by a group on campus other than DSPS ( $M=1.68$ ).

The staff meeting was the training format with the highest degree of involvement reported by administrators. Similarly, administrators participated more in training offered by DSPS than any other training. Table 11 presents frequencies for each training format and trainer. Sixty six percent of the administrators ( $n=72$ ) attended DSPS training in staff meetings and 49% ( $n=53$ ) attended workshops. In both instances administrators perceived the information delivered by DSPS as very valuable. On the other hand, 28% ( $n=30$ ) reported no training offered by other groups on campus in either staff meetings or

workshops. Twenty-two percent of the administrators (n=23) indicated they were unaware of any training offered by groups outside the institution.

Table 11

*Frequency Distribution for Administrator Participation in Training*

	No Training Done	Unaware of Training	Aware, Not Attend	Attend, No Value	Attend, Valuable	Personally Involved	Missing Data
<b>STAFF MTG</b>							
▪ DSPS	3.7%	7.3%	15.6%	2.8%	52.3%	11%	7.3%
▪ Dept/Sch.	19.3%	9.2%	10.1%	0%	39.4%	11%	11%
▪ Campus Grp.	27.5%	22%	10.1%	1.8%	21.1%	5.5%	11.9%
▪ Off Campus Grp.	21.1%	23.9%	12.8%	.9%	20.2%	3.7%	17.4%
<b>WORKSHOP</b>							
▪ DSPS	5.5%	10.1%	25.7%	.9%	36.7%	11%	10.1%
▪ Dept/Sch.	22%	11%	14.7%	.9%	27.5%	10.1%	13.8%
▪ Campus Grp.	28.4%	20.2%	11%	1.8%	17.4%	4.6%	16.5%
▪ Off Campus Grp.	22%	24.8%	13.8%	1.8%	21.1%	4.6%	11.9%

Overall, attendance and perceived value of training was low. Data for participation were coded and summed resulting in a group mean score of 17.77 out of a possible 40 points. Only 78 of the surveys were utilized in this analysis due to missing values in the remaining 31 cases.

Table 12 presents data regarding administrators use of disability related resources. The resources rated by administrators as providing “considerable to great help” were a

directory of disability-related services and resources (63%), faculty handbook about students with disabilities (53%), and individual assistance from a department chair (41%). The least useful resources were campus newsletter articles (11%), videos on disability related topics (10%), and websites on disability related topics (9%).

Predominantly, administrators rated the resources they utilized as being considerably helpful. The resources that were least likely to exist on a campus were DSPS newsletters (43%), teaching handbooks (37%), and adaptive technology guides (30%).

Table 12

*Frequency Distribution for Administrator use of Disability-Related Resources*

	DOES NOT EXIST	NEVER USED	LITTLE/ NO HELP	GREAT HELP
Directory of Resources	10.7%	23.8%	2.4%	63.1%
Faculty Handbook	25%	16.3%	6.3%	52.5%
Teaching Handbook	37%	34.2%	1.4%	27.4%
Campus Articles	28.9%	26.3%	10.5%	34.2%
DSPS Newsletter	42.5%	15%	6.3%	36.3%
Adaptive Tech. Guide	29.7%	31.1%	6.8%	32.4%
Accessible Website Guide	27.8%	30.4%	3.8%	38%
Disability-Related Videos	19.4%	41.7%	9.7%	29.2%
Disability-Related Website	23.9%	43.7%	8.5%	23.9%
Dept. Chair Assist	21.3%	30.7%	6.7%	41.3%
Faculty Mentor	21.9%	32.9%	4.1%	41.1%

Scores for utilization of resources were coded and summed resulting in a mean score of 16.30 out of a possible 36 points. Administrators' utilization of and reported worth of resources appear low. However, 56 surveys (51%) were incomplete and not included in this analysis, which may have impacted the outcome.

*2a. Is there a significant relationship between administrators' experience and level of involvement with individuals with disabilities and their reported knowledge regarding services and supports for students with disabilities?*

When the administrators' personal and professional experiences with disability were summed and correlated with their summed scores for knowledge (Table 13), there was no relationship between the two sets of scores ( $r(107) = .017, p < .05$ ).

Table 13

*Correlation between Administrator Knowledge of Disability Services & Support and Administrator Level of Experience with Students with Disabilities*

		ADMIN. EXPERIENCE	KNOWLEDGE OF SUPPORTS
ADMINISTRATOR EXPERIENCE	Pearson Correlation	1	.017
	Sig. (2-tailed)	.	.858
	Sum of Squares and Cross-products	18312.734	119.569
	Covariance	169.562	1.107
	N	109	109
KNOWLEDGE OF SUPPORTS	Pearson Correlation	.017	1
	Sig. (2-tailed)	.858	.
	Sum of Squares and Cross-products	119.569	2604.991
	Covariance	1.107	24.120
	N	109	109



There was no significant relationship noted between administrators' professional and personal experience with disability and their knowledge regarding services and supports for students with disabilities.

Components of the personal and professional experience variable were then correlated separately with the knowledge variable. These components included the number of students with disabilities, whether or not the respondent personally had a disability, whether or not there was a significant other with a disability, and level of involvement with the significant other. The one significant correlation involved whether or not the respondent reported having a disability (Table 14). Although the correlation was significant, it was very low ( $r(106)=-.243, p<.01$ ).

Table 14

*Correlation between Administrator Knowledge of Disability Service & Support and Personally having a Disability*

		KNOWLEDGE OF SUPPORTS	HAS A DISABILITY
KNOWLEDGE OF SUPPORTS	Pearson Correlation	1	-.243**
	Sig. (2-tailed)	.	.011
	Sum of Squares and Cross-products	2604.991	-44.444
	Covariance	24.120	-.415
	N	109	108
HAS A DISABILITY	Pearson Correlation	-.243**	1
	Sig. (2-tailed)	.011	.
	Sum of Squares and Cross-products	-44.444	12.917
	Covariance	-.415	.121
	N	108	108

\*\* Correlation is significant at the 0.01 level (2-tailed).

*2b. Is there a significant relationship between administrators' level of participation in disability training opportunities and their knowledge regarding services and supports for students with disabilities?*

A correlation of  $r(76) = .610$ ,  $p < .05$  between administrators' level of participation in training and reported knowledge about services and supports was not significant and suggests little or no relationship between these two variables (Table 15).

Table 15

*Correlation between Administrator Knowledge of Disability Services & Support and Administrator Level of Participation in Disability Training*

		KNOWLEDGE OF SUPPORTS	DISABILITY TRAINING
KNOWLEDGE OF SUPPORT	Pearson Correlation	1	.059
	Sig. (2-tailed)	.	.610
	Sum of Squares and Cross-products	2604.991	204.692
	Covariance	24.120	2.658
	N	109	78
DISABILITY TRAINING	Pearson Correlation	.059	1
	Sig. (2-tailed)	.610	.
	Sum of Squares and Cross-products	204.692	6951.846
	Covariance	2.658	90.284
	N	78	78

*2c. Is there a significant relationship between administrators' utilization of disability resources and their knowledge regarding services and supports for students with disabilities?*

A third correlation (Table 16) was calculated to determine the extent to which administrators' knowledge was related to their utilization of available disability resources. The relationship was not statistically significant ( $r(51)=-.065$ ;  $p<.05$ ).

Table 16

*Correlation between Administrator Knowledge of Disability Services & Support and Administrator Use of Disability-Related Resources*

		KNOWLEDGE OF SUPPORTS	RESOURCE UTILIZATION
KNOWLEDGE OF SUPPORTS	Pearson Correlation	1	-.065
	Sig. (2-tailed)	.	.644
	Sum of Squares and Cross-products	2604.991	-150.264
	Covariance	24.120	-2.890
	N	109	53
RESOURCE UTILIZATION	Pearson Correlation	-.065	1
	Sig. (2-tailed)	.644	.
	Sum of Squares and Cross-products	-150.264	3549.170
	Covariance	-2.890	68.253
	N	53	53

*Research Question 3: What information do administrators and Disabled Students Programs and Services (DSPS) staff perceive higher education administrators need to lead efforts towards enhancing colleges' responsiveness to postsecondary students with disabilities?*

Respondents indicated the degree to which administrators needed more information about 19 areas related to students with disabilities. The collective responses for both the administrator and DSPS groups regarding 11 policies, procedures, and services related to students with disabilities are shown in Table 17. The top three areas

rated by both administrators and DSPS as most important for administrators to have were: (a) successful accommodation models ( $M=4.08$ ); (b) the institution's commitment to barrier-free access to the learning environment ( $M=4.06$ ); and (c) the accommodation process for students with disabilities ( $M=3.96$ ). Other areas averaged between 3.32 and 3.89.

Table 17

*Administrator & DSPS Perception about the Need for More Information on Disability-Related Policies, Procedures, & Services*

Policies, Procedures, & Services	N	Mean
Models For Accommodating Students with Disabilities	223	4.08
Commitment to Barrier-Free Access to Learning	224	4.06
Accommodation Process for Students with Disabilities	222	3.96
Americans with Disabilities Act (ADA)	222	3.89
Programs & Services for Students with Disabilities	221	3.89
Student Disability Support Service	220	3.82
Section 504 of the Vocational Rehabilitation Act	223	3.81
Counsel and Career Development Office	222	3.48
Admissions Process for Students with Disabilities	220	3.47
Academic Counseling for Students with Disabilities	221	3.47
Brown vs. Board of Education	220	3.32

The collective responses from both the administrator and DSPS groups regarding the need for more information about accommodating students with disabilities in eight campus activities and services are shown in Table 18. The overall physical accessibility of the campus was rated the most important area in which administrators needed information ( $M=4.19$ ). On the other hand, accommodating students with disabilities in housing was rated as the least important ( $M=3.35$ ). Campus clubs, financial aid, athletics, outreach/recruitment, library, and academics averaged between 3.69 and 3.98.

Table 18

*Administrator & DSPS Perception about the Need for More Information on Accommodating Students with Disabilities in Campus Activities & Services*

Campus Activities & Services	N	Mean
Physical Accessibility of Campus Overall	221	4.19
Academics	221	3.98
Library	221	3.95
Outreach/Recruitment	223	3.90
Athletics	221	3.86
Financial Aid	221	3.76
Campus Clubs	220	3.69
Housing	201	3.35

Mean scores for each survey item were calculated separately for each group and ranked in descending order of perceived importance. According to administrators (Table 19), the top three areas that were most important for administrators to have information

about were: (a) models for accommodating students with disabilities ( $M=3.79$ ); (b) the accommodation process for students with disabilities ( $M=3.0$ ); and (c) the institution's commitment to barrier-free access to the learning environment ( $M=2.98$ ). Additionally, it was important for administrators to have information about physically accommodating students with disabilities on campus ( $M=3.35$ ), in athletics ( $M=3.26$ ), and during outreach and recruitment ( $M=3.18$ ). Academics, library, campus clubs, financial aid, and housing ranged from a low of 2.40 to 3.12.

Table 19

*Administrator Perception about the Need for More Information on Disability-Related Policies, Procedures, Services, & Campus Activities*

Policies, Procedures, & Services	N	Mean
▪ Models For Accommodating Students with Disabilities	101	3.79
▪ Accommodation Process for Students with Disabilities	99	3.00
▪ Commitment to Barrier-Free Access to Learning	100	2.98
▪ Programs & Services for Students with Disabilities	98	2.84
▪ Section 504 of the Vocational Rehabilitation Act	101	2.81
▪ Americans with Disabilities Act (ADA)	98	2.79
▪ Student Disability Support Service	97	2.66
▪ Counseling and Career Development Office	99	2.64
▪ Academic Counseling for Students with Disabilities	99	2.63
▪ Brown vs Board of Education	99	2.48
▪ Admissions Process for Students with Disabilities	100	2.25

Table 19 (continued)

Campus Activities & Services	N	Mean
▪ Physical Accessibility Of Campus Overall	98	3.35
▪ Athletics	99	3.26
▪ Outreach/Recruitment	99	3.18
▪ Academics	97	3.12
▪ Library	97	3.12
▪ Campus Clubs	96	2.94
▪ Financial Aid	98	2.93
▪ Housing	91	2.40

DSPS respondents (Table 20) also rated their campus' commitment to barrier-free access to learning as one of the top three areas for administrators to have information ( $M=4.93$ ). Information about ADA and Student Disability Support Services were also in the top three ( $M=4.76$ ,  $M=4.73$ ). Similar to administrators, DSPS rated the overall physical accessibility of campuses as the most important area administrators need information about in terms of accommodating students with disabilities ( $M=4.87$ ). Having information about accommodating students with disabilities in academics and the library were the other two areas rated by DSPS as most important for administrators ( $M=4.65$ ,  $M=4.59$ ). It is interesting to note that DSPS perceptions ranked a minimum of one scale higher in all campus activities and services than administrator perceptions.

Table 20

*DSPS Perception about Administrators' Need for More Information on Disability-Related Policies, Procedures, Services, & Campus Activities*

Policies, Procedures, Services	N	Mean
▪ Commitment to Barrier-Free Access to Learning	124	4.93
▪ Americans with Disabilities Act (ADA)	124	4.76
▪ Student Disability Support Service	123	4.73
▪ Accommodation Process for Students with Disabilities	123	4.73
▪ Programs & Services for Students with Disabilities	123	4.72
▪ Section 504 of the Vocational Rehabilitation Act	122	4.63
▪ Admissions Process for Students with Disabilities	120	4.48
▪ Models For Accommodating Students with Disabilities	122	4.32
▪ Counseling & Career Development Office	123	4.16
▪ Academic Counseling for Students with Disabilities	122	4.15
▪ Brown vs Board Of Education	121	4.01
<b>Campus Activities &amp; Services</b>		
▪ Physical Accessibility of Campus Overall	123	4.87
▪ Academics	124	4.65
▪ Library	124	4.59
▪ Outreach/Recruitment	124	4.47
▪ Financial Aid	123	4.43
▪ Athletics	122	4.34
▪ Campus Clubs	124	4.27
▪ Housing	110	4.15



In addition to the inquiry regarding information about policies, procedures, services, and activities, administrators were asked to indicate the perceived worth of specific resources to assist classroom instructors in accommodating students with disabilities. The mean scores for each resource are depicted in Table 21. Response choices for administrators ranged from “No intention of using this resource in the future” (0 point) to “I could provide valuable input regarding this resource” (3 points).

Table 21

*Administrators' Rating of the Perceived Worth of Disability-Related Resources*

Resource	N	Mean
Faculty Handbook about Student with Disabilities	63	1.97
Directory of Disability Resources Available to Students	65	1.92
Handbook about Teaching Students with Disabilities	68	1.79
Guide to Making Websites Accessible	65	1.74
Guide to Adaptive Technology	69	1.70
Website on Disability-Related Topics	65	1.66
Disability Support Services Newsletter	59	1.61
Videos on Disability-Related Topics	70	1.53
Individual Assistance Provided by Department Chair	55	1.51
Consult with Faculty Mentor	50	1.50
Campus Newspaper Articles	58	1.48

A faculty handbook about students with disabilities was rated the highest ( $M = 1.97$ ) in terms of perceived future worth followed by a directory of disability services and resources available to students with disabilities ( $M = 1.92$ ) and a handbook about teaching students with disabilities ( $M = 1.79$ ). A faculty handbook ( $M = 1.86$ ) and directory ( $M = 2.18$ ) also appeared in the top three list as most helpful resources utilized by administrators in the past (Table 22). A handbook about teaching students with

disabilities was reported as the least helpful resource ( $M=1.19$ ) utilized by administrators in the past (Table 22).

Table 22

*Administrators Perception About the Usefulness of Disability-Related Resources Utilized in the Past*

Resource	N	Min.	Max.	Mean
Directory of Disability Resources Available to Students	84	0	3	2.18
Faculty Handbook about Students with Disabilities	80	0	3	1.86
Individual Assistance Provided by Department Chair	75	0	3	1.68
Consult with Faculty Mentor	73	0	3	1.64
Guide to Making Websites Accessible	79	0	3	1.52
Campus Newspaper Articles	76	0	3	1.50
Videos on Disability-Related Topics	72	0	3	1.49
Guide to Adaptive Technology	74	0	3	1.42
Disability Support Services Newsletter	80	0	3	1.36
Website on Disability-Related Topics	71	0	3	1.32
Handbook about Teaching Students with Disabilities in Specific Disciplines	73	0	3	1.19

Table 23 presents the frequency distribution of administrators' perception regarding the future worth of identified disability-related resources. Fifty (73%) administrators were either very interested ( $n=37$ ) or felt they could provide input ( $n=13$ ) in the development of a teaching handbook (Table 23). Comparatively, 52 (71%) administrators indicated that this same resource either did not exist ( $n=27$ ) or was not used ( $n=25$ ) in the past (Table 12). Administrators seem to recognize the worth of a teaching handbook. Similarly, 40 (61%) administrators indicated they were very

interested in a guide for making websites accessible (Table 23). In terms of past use (Table 12), 46 (58%) administrators rated the guide for accessible websites was either non-existent (n=22) or was never used (n=24).

Table 23

*Frequency Distribution for Administrators' Rating of the Perceived Worth of Disability-Related Resources*

Resource	No Intent	May be Interest.	Very Interest.	Provide Input
Directory of Disability Resources	3.0%	18.2%	60.6%	18.2%
Faculty Handbook	1.6%	21.9%	53.1%	23.4%
Teaching Handbook	10.1%	17.4%	53.6%	18.8%
Campus Newspaper Articles	13.6%	33.9%	40.7%	11.9%
DSPS Newsletter	13.3%	23.3%	50.0%	13.3%
Guide to Adaptive Technology	4.3%	31.4%	52.9%	11.4%
Accessible Website Guide	3.0%	27.3%	60.6%	9.1%
Disability-Related Videos	14.1%	25.4%	52.1%	8.5%
Disability-Related Websites	7.6%	25.8%	57.6%	9.1%
Department Chair Assistance	14.3%	32.1%	39.3%	14.3%
Consult with Faculty Mentor	13.7%	33.3%	39.2%	13.7%

Overall, the perceived worth of these resources was rated fairly high by administrators. For 8 out of 11 of the resources, at least 50% of the administrators indicated they were very interested in using the resource in the future.

Only 36 of the 109 administrators responded to all 11 items on this final survey question. Responses for each survey item were scored and summed for each respondent. The mean score for the 36 respondents was 18.64 with a range of 5 – 33.

DSPS respondents also reported their perception regarding the usefulness of these same resources for administrators. The survey choices ranged from “Strongly Agree” (5 points) to “Strongly Disagree” (1 point). Mean scores for each resource were calculated and ranked in descending order of perceived need. These results are reported below in Table 24. Similar to the administrator group response, the faculty handbook about students with disabilities was rated by DSPS as the most useful resource ( $M=4.73$ ). A teaching handbook was also perceived by DSPS as very useful for administrators ( $M=4.48$ ). Individual assistance from a department chair was rated by DSPS as the least useful resource for administrators ( $M=3.72$ ).

Table 24

*DSPS Perceptions About the Usefulness of Disability-Related Resources to Administrators*

Resource	N	Min.	Max.	Mean
Faculty Handbook about Students with Disabilities	124	3	5	4.73
Teaching Handbook for Specific Disciplines	123	2	5	4.48
Guide to Making Websites Accessible	124	2	5	4.47
Directory of Disability Resources Available to Students	123	2	5	4.36
Campus Newspaper Articles	122	3	5	4.28
Guide to Adaptive Technology	121	2	5	4.13
Disability Support Services Newsletter	121	2	5	4.06
Consultation with a Faculty Mentor	122	2	5	4.05
Websites on Disability-Related Topics	123	2	5	3.98
Video on Disability-Related Topics	123	2	5	3.89
Individual Assistance Provided by Department Chair	121	2	5	3.72

*3a. Is there a significant difference between administrators' and Disabled Students Programs and Service staff's perceptions regarding information administrators need to meet the needs of students with disabilities?*

Responses to the 11 policies, procedures and services were summed for each respondent with scores ranging from 11 to 55. The average score for administrators was 30.80 compared to an average of 49.59 for DSPS staff.

A one-way ANOVA was conducted to determine if there was a significant difference between administrators and DSPS in their responses to the 11 policies, procedures, and services. The ANOVA, delineated in Table 25, yielded  $F_{1,204}=320.870$ ,  $p<.05$ , which indicated a significant difference between administrators and DSPS. However, since the assumption of equal population variance was not met, the Kruskal-Wallis test was performed. The Kruskal-Wallis test also revealed a significant difference between administrators and DSPS in their perceptions about administrators' need for information about 11 policies, procedures and services related to students with disabilities ( $H = 130.966$ ,  $p = .000$ ).

Table 25

*ANOVA for Administrator and DSPS Perception about Administrators Need for Information about 11 Policies, Procedures, & Services*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17901.935	1	17901.935	320.870	.000
Within Groups	11325.753	203	55.792		
Total	29227.688	204			

Scores were summed for survey items pertaining to accommodating students with disabilities in eight campus activities and services. The average score was 24.22 for administrators and 35.72 for DSPS staff out of a maximum of 40 points.

A one-way ANOVA was conducted to determine if there was a significant difference between administrators and DSPS in their responses regarding the need for information about accommodations in the eight activities and services. The ANOVA, delineated in Table 26, yielded  $F_{1,198}=159.602$ ,  $p<.05$ , which indicated a significant difference between administrators and DSPS. However, since the assumption of equal population variance was not met, the Kruskal-Wallis test was performed. The Kruskal-Wallis test also revealed a significant difference between administrators and DSPS in terms of their perceptions about administrators need for information about accommodating students with disabilities in campus activities and services ( $H = 89.360$ ,  $p = .000$ ).

Table 26

*ANOVA for Administrators and DSPS Responses Concerning Administrators Need for Information about Accommodating Students with Disabilities in Campus Activities and Services*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6534.196	1	6534.196	159.602	.000
Within Groups	8065.271	197	40.940		
Total	14599.467	198			

Overall, the DSPS group rated administrators' need for information in all areas significantly higher than the administrator group (Figure 4).

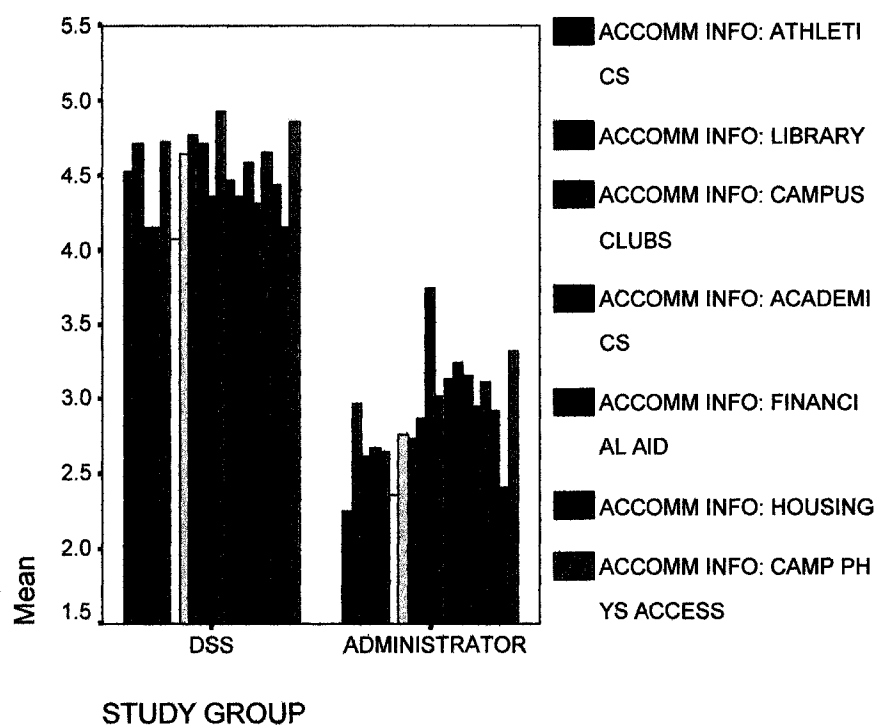


Figure 4. Comparison of DSPS and administrators perceptions regarding the need for administrators to have information about disability-related topics and issues.

*3b. Is there a significant relationship between administrators' perceived need for information and their current knowledge regarding services and support for students with disabilities?*

A significant correlation of  $r(82) = -.318, p < .01$  between administrators' reported knowledge about disability-related responsibilities and perceived need for information on disability-related topics suggests a weak relationship between the two variables. The results are presented in Table 27.

Table 27

*Relationship between Administrators' Knowledge about Disability-Related Services and Supports and Perceived Need for Information*

		NEED FOR INFO.	KNOWLEDGE OF SUPPORTS
NEED FOR INFO.	Pearson Correlation	1	-.318**
	Sig. (2-tailed)	.	.003
	Sum of Squares and Cross-products	23232.952	-2064.714
	Covariance	279.915	-24.876
	N	84	84
KNOWLEDGE OF SUPPORTS	Pearson Correlation	-.318**	1
	Sig. (2-tailed)	.003	.
	Sum of Squares and Cross-products	-2064.714	2604.991
	Covariance	-24.876	24.120
	N	84	109

\*\* Correlation is significant at the 0.01 level (2-tailed).

Correlation coefficients were also calculated separately to determine if there was a significant relationship between current knowledge and the (a) need for information about 11 policies, procedures and services; (b) the need for information about accommodating students with disabilities in 8 campus activities and services; and (c) the perceived worth of 11 resources. A significant correlation of  $r(89) = -.367, p < .01$  occurred between current knowledge and the need for information about accommodating students with disabilities. Table 28 displays a low Pearson Correlation of  $-.367$ .



Table 28

*Relationship between Administrators' Current Knowledge and Need for Information about Accommodating Students with Disabilities*

		KNOWLEDGE	NEED FOR INFO.
KNOWLEDGE	Pearson Correlation	1	-.367**
	Sig. (2-tailed)	.	.000
	N	109	91
NEED FOR INFO	Pearson Correlation	-.367**	1
	Sig. (2-tailed)	.000	.
	N	91	91

\*\* Correlation is significant at the 0.01 level (2-tailed).

*3c. Is there a significant relationship between administrators' perceived need for more information and their personal and professional experience with disability?*

A Pearson correlation was calculated to determine the extent to which administrators' perceived need for more information was related to their professional and personal experience with disability. Table 29 shows the relationship was not statistically significant ( $r(82) = .325, p < .05$ ).

Table 29

*Relationship between Administrators' Personal and Professional Experience with Disability and Perceived Need for Information*

		NEED FOR INFO.	EXPERIENCE LEVEL
NEED FOR INFO	Pearson Correlation	1	.109
	Sig. (2-tailed)	.	.325
	Sum of Squares and Cross-products	23232.952	2026.286
	Covariance	279.915	24.413
	N	84	84
EXPERIENCE	Pearson Correlation	.109	1
	Sig. (2-tailed)	.325	.
	Sum of Squares and Cross-products	2026.286	18312.734
	Covariance	24.413	169.562
	N	84	109

### *Summary*

Administrators were relatively knowledgeable about responsibilities to students with disabilities with a group mean score of 45 out of 61 possible points. Administrators were more knowledgeable about the processes for accommodating students with disabilities than they were about who was responsible for the various steps within that process. In particular, administrators were unsure whether students with disabilities should be responsible for documenting their disability, deciding on necessary accommodations, and informing the instructor of necessary accommodations.

Both administrators and DSPS seemed uncertain about who was responsible for the academic advising of students with disabilities. Only 47% of the administrators and 47% of DSPS indicated that the responsibility for advising should be shared between the

Disability Support Services Office and faculty advisors. The other half, 46% of administrators and 44% of DSPS, indicated that the Disability Support Services office should be solely responsible for student advising. It appears that a majority of the respondents did not perceive academic advising as an area for shared responsibility.

Most of the correlation computations between knowledge and other variables were not significant. No significant relationships were measured between knowledge and professional/personal experience with disability ( $r=.017$ ); level of participation in disability training ( $r=.06$ ); or utilization of disability resources ( $r=-.06$ ). A moderate negative correlation between knowledge and perceived need for information on disability-related topics ( $r=-.318$ ) was significant at the .05 level. In addition, a significant correlation was measured between knowledge and the need for information about accommodating students on campus ( $r=-.367$ ). These low correlations and the lack of significant relationships with other variables may be due to the low variability ( $SD = 4.91$ ) in administrators' knowledge scores.

The administrators who participated in the study may represent a homogenous group in terms of their knowledge, experience, and interest regarding disability. It is possible that these administrators had more experience and were more knowledgeable about responsibilities to students with disabilities than the administrators who chose not to participate. This possibility is further supported by the large percentage of administrators (57%) reporting direct involvement with 16 or more students within the past four years. Over 60% of the administrators also reported attending some kind of training on disability. The profile of the administrators who participated in the study seem to represent a select group. A more diverse sample of administrators with varying

levels of disability knowledge, experience, and interest may alter some of the results obtained in this study. For example, the relationship between knowledge and some of the variables may be significant, but the low variability in knowledge scores preclude any significant findings.

While a large segment of the administrator group reported attending a training on disability, the overall group participation score was low (18 out of 40 possible points). Moreover, administrators reported use of existing disability resources was low (16.30 out of 36 possible points). The number of missing data may have affected the summed scores for training participation and resource utilization. Scores were not summed for surveys in which the question was not completely answered. Thirty-one cases were missing for the question on training participation; whereas, 56 cases were missing for the inquiry about resource utilization. These two questions appeared in the last two pages of the 5-page survey. The instrument may have been too lengthy for respondents to complete in full. The format of the last page on the survey may have also been too confusing and time-consuming for the respondent to decipher and complete. Eleven items were listed and participants were instructed to respond to each item using two different scales. Some administrators responded on only one scale or they elected not to respond to all 11 items. A 5-point Likert scale, identical to the format used for the DSPS version may have been more user-friendly.

Comparison of administrator and DSPS mean scores were conducted in two areas: (a) knowledge and (b) need for information. In both cases significant differences were identified. DSPS was significantly more knowledgeable than administrators regarding responsibilities to students with disabilities and the process for providing

accommodations ( $F_{1, 231} = 29.122, p < .05$ ). DSPS also reported a greater need for administrators to obtain information about: (a) disability-related policies, procedures, and services related to students with disabilities ( $F_{1, 203} = 320.879, p < .05$ ) and (b) accommodating students in campus activities and services ( $F_{1, 197} = 159.602, p < .05$ ). Because the Levene test for equality of variance indicated that lack of homogeneity existed for several of the ANOVAs, the Kruskal-Wallis test was performed. Although ANOVA is robust to the violation of the homogeneity of variance assumption, the researcher elected to also utilize a nonparametric conservative procedure. Kruskal-Wallis is a nonparametric test that makes no assumption about homogeneity of the variance in the population sample. The Kruskal-Wallis test showed significant differences between administrators and DSPS on knowledge ( $H=23.543; p=.000$ ); perceived need for information on disability-related policies ( $H=130.966; p=.000$ ); and perceived need for information about accommodating students ( $H=89.630; p=.000$ ).

The survey was distributed in June, 2002 which coincided with the end of the semester, graduation, and summer schedules. The return rate of 36% was good and the sample demographics were for the most part evenly distributed in terms of administrative ranks and DSPS positions. However, dissemination of the survey at such a busy time in the academic year may have led to only the individuals most interested in this topic to respond. There is no method for identifying the non-respondents in order to determine if they differ in some important way from the respondents.

## Chapter 5

### Findings, Implications, and Recommendations

As more students with disabilities pursue postsecondary education, colleges and universities are prompted to examine how they can better meet the needs of an increasingly diverse student population. Administrators play a key role in ensuring their institutions are responsive to students from diverse backgrounds and varied learning styles. The increasing number of students with disabilities provides an opportunity for administrators to create an environment that embraces diversity and provides the support and services that can enhance the learning of all students. Assuming a leadership role and taking the opportunity to create an inclusive environment requires knowledge about disability legislation (Baggett, 1994; Jacobs & Jacobs, 1984; Thompson, Bethea, & Turner, 1997); accommodations for students with disabilities (Nelson, Dodd, & Smith, 1990; Satcher, 1992); and rights and responsibilities of students and institutions (Getzel, Stodden, & Briel, 2001; Mellard, Hall, & Parker, 1999; Rothstein, 1998).

The purpose of this study was to investigate the knowledge and information administrators currently possess and need to effectively and appropriately respond to students with disabilities. The variables examined were administrators': (a) knowledge about their college's responsibilities and the accommodation process related to student with disabilities; (b) perceptions regarding training needs in areas related to students with disabilities; and (c) personal and professional experience with disability. Comparative

data was obtained from DSPS professionals. Data was collected through a survey disseminated to 108 community colleges throughout California.

College administrators and DSPS professionals from 65 colleges participated in the study with a survey response rate of 36%. Administrators (n=109) represented Presidents, Vice Presidents, Deans, and Associate Deans; whereas DSPS (n=124) represented Directors, Supervisors, Coordinators, and Counselors.

### *Discussion of Findings*

The following section will present a discussion of the findings according to the three main variables that were investigated. These variables were knowledge about responsibilities and accommodations for students with disabilities; perception regarding training needs; and personal and professional experience with disability.

*Knowledge.* Overall, administrators were more knowledgeable about their responsibilities to students with disabilities than what was reported in prior studies (Baggett, 1994; Jacobs & Jacobs, 1984; Thompson, Bethea, & Turner, 1997). Most administrators were knowledgeable about the steps that should be taken if a student with a documented disability enrolled in a class. However, administrators were not as clear about who should be responsible for certain processes involving students with disabilities. In particular, administrators did not feel that students with disabilities should be responsible for deciding on necessary accommodations or informing the instructor of the necessary accommodations. Other studies have found the opposite in which administrators believed students with disabilities should have greater responsibility for identifying needs and locating services (Albert & Fairweather, 1990; Beilke & Yessel, 1998; Fitchen et al., 1988; Fitchen et al., 1990). Administrators also did not think

classroom instructors should share the responsibility for deciding on necessary accommodations. It appears that administrators felt DSPS should be solely responsible for these two processes. In terms of academic advising, administrators did not feel that the faculty advisor should share the responsibility with DSPS. No significant differences in knowledge were observed between administrators from different ranks. According to these results, administrators seem to defer to DSPS for all aspects involving students with disabilities. The deference to DSPS reflected administrators' acknowledgment of DSPS and the high value administrators placed on their disability expertise.

DSPS respondents, on the other hand, indicated that students with disabilities should share the responsibilities for a number of the processes. Recognizing the responsibilities of students with disabilities reflects the emphasis many DSPS offices place on self-advocacy and self-determination by students with disabilities (Brown, Clopton, & Tusler, 1991; Roessler, Brown, & Rumrill, 1998). The emphasis on self-advocacy is further corroborated by the fact that only 61% of DSPS felt their office should be responsible for informing the instructor of a student's disability. Legally, students have the greatest responsibilities in the areas of academic adjustments and accommodations. The institution is not obligated to accommodate students unless the student notifies the instructor of his or her disability, requests accommodations, and provides supporting documents (Heyward, 1993).

Regarding academic advising for students with disabilities, DSPS like administrators, felt DSPS should be solely responsible. Only 52% of respondents identified the faculty advisor on campus as sharing this responsibility with DSPS. There is a role for both DSPS and faculty advisors in supporting the student with a disability.



DSPS brings to the table their expertise in the area of disability; whereas, faculty advisors bring their knowledge of the curriculum, academic program, and in some cases their knowledge of disability. “The career-related needs of students with disabilities do not differ from students without disabilities in issues. However, college students with disabilities may face unique issues arising from their disability” (Enright, Conyers, & Syzmanski, 1996, p. 6). It is regarding the unique issues that the DSPS counselor can provide considerable information and knowledge. Studies focused on career counseling for students with disabilities found a great need to improve the quality of student advising provided by career counselors (Aune et al., 1995; Enright, Conyers, & Syzmanski, 1996).

DSPS respondents scored significantly higher than administrators on the knowledge measurement. It is expected that DSPS professionals would score higher as their primary responsibility is to provide services and support for students with disabilities. However, meeting the needs of students with disabilities should be a responsibility that is shared amongst administrators, faculty, and staff. Interestingly, many administrators (57%) marked the university administrator as responsible for providing adaptive equipment. This is a marked improvement from the apparent resistance presented by institutions after the initial passage of Section 504 of the Rehabilitation Act (1973). At that time institutions felt the cost of accommodations, including the provision of auxiliary aids, should be covered by state vocational rehabilitation agencies, the Veterans Administration, and private charities (Milani, 1996). In fact, the provision of adaptive equipment was the only process in which university administrators were more likely to be identified as one of the responsible parties compared to the other six processes listed in the survey. Involvement of university

administrators in this process may reflect administrators' acknowledgment that adaptive equipment and accommodations are instrumental to the success of students with disabilities in a postsecondary setting. This is an important finding given the number of studies that have found institutions were reluctant, skeptical, or uncomfortable about the provision of accommodations and auxiliary aids (Aune, 1995; MacLean & Gannon, 1997; NCSPEs, 2000; Nelson, Dodd, & Smith, 1990; Satcher, 1992; Williams & Ceci, 1999).

*Perception regarding training needs.* The area of accommodation, in both practice and policy, was rated the highest in terms of training needs for administrators. Administrators needed more information about accommodation models, the accommodation process, and the institutions' commitment to barrier-free access to the learning environment. These findings duplicate recommendations from other studies regarding the need for administrators as well as faculty and staff to engage in training on accommodation and access (Burgstahler, Duclos, & Turcotte, 2000; Thomas, 2000).

Unlike the administrators in the SDSU (2000) study, the administrators in this study rated an institution's commitment to barrier-free access to the learning environment as one of the top three areas of need for training. This finding strongly supports the importance of leadership in advancing the opportunities and benefits of postsecondary education to students with disabilities. If respondents perceive a need for more information in this area, they may be unclear about an institution's policy regarding students with disabilities. Moreover, administrators may not be clear about an institution's mission as it pertains to students with disabilities. Without this clarity, administrators are not able to communicate to faculty and staff how and to what degree

students with disabilities can be supported and accommodated in higher education. The DSPS respondents from the current study and the SDSU (2000) study also placed a high priority for administrators to obtain more information about their institutions' commitment to barrier-free learning.

Respondents also rated the perceived need for administrators to obtain information about ways to best accommodate students with disabilities participating in specific campus activities and services. The overall physical accessibility of the campus was rated the highest by both administrators and DSPS. Thirty years after the passage of Section 504, physical accessibility continues to challenge institutions of higher education. This finding is corroborated by other studies in which campus accessibility for people with disabilities is identified as an ongoing issue (Malakpa, 1997, McGuinness, 1993; Ryan, 1993; West et al., 1993).

Administrators felt they needed more information about accommodating students with disabilities in athletics as well as in outreach and recruitment activities. Athletics appeared second in order of importance compared to academics and library which appeared fourth and fifth on the list. For DSPS respondents, academics and library appeared second and third on the list. The difference in perceptions between administrators and DSPS might suggest different priorities for the two groups. For example, in working with students with disabilities, DSPS may deal primarily with issues related to academic coursework. Administrators, on the other hand, may be dealing more with the visibility of the institution such as through athletics and outreach.

It is interesting that administrators were very interested in information about accommodating students with disabilities during outreach and recruitment activities, but

did not consider information about the admissions process for students with disabilities very important. In fact, obtaining information about the admissions process appeared last in the list of policies, procedures, and services. This may be a concern given the violations the Office of Civil Rights has found at the admissions level including illegal inquiries about students' disabilities and lowered weight on scores for standardized tests taken with an accommodation (McCusker, 1995; Milani, 1996; Ryan, 1993; Tucker, 1996).

Obtaining information about programs and services for students with disabilities, Section 504, and the ADA was secondary in importance for administrators. In contrast, administrators in the SDSU (2000) study gave ADA and Section 504 a higher priority. According to the SDSU (2000) results, ADA and Section 504 supersede the need for information about accommodation processes and program and services. The contrasting findings suggest that the administrators in this study were more interested in the implementation of the legislative mandates as opposed to the actual legislation. This finding might also suggest that administrators who participated in this study have been saturated with information on the legal aspects of Section 504 and ADA and were now ready to advance their knowledge and skills. "Issues regarding the delivery of services to students on the postsecondary level are becoming increasingly complicated. The center of controversy has moved from the relatively simple questions of whether academic adjustments should be provided to more complicated and troubling questions of what, how, and in what form they should be provided" (Heyward, 1993, p. 28). The emphasis on practice over legislation signifies a progression from administrators questioning their

institutions' obligation regarding the provision of reasonable accommodations to examining the best strategies for accommodating students with disabilities.

DSPS respondents, on the other hand, felt it was more important for administrators to obtain information about the ADA and student disability support services than the accommodation process. DSPS respondents in both this study and the SDSU (2000) study rated commitment to barrier-free access, ADA, and student disability support services as the top three areas in which administrators should obtain more information. The identification of legislation information as an area of need was shared by disability service directors who participated in a national study (Salzberg et al., 2002) on faculty training needs. The DSPS directors felt educating administrators about their legal obligations was critical to obtain administrative support for faculty training on disability.

There was a significant difference between administrators and DSPS respondents in the degree to which administrators needed more information about disability-related policies, procedures, activities and services. The need for administrators to obtain information was perceived as more important by DSPS than the administrators. This finding reflects the SDSU (2000) findings and once again suggests the competition for priorities. The DSPS staff are clear in their objectives to provide support and services to students with disabilities. While there are many activities related to this objective, their primary consumer is the student. Administrators, on the other hand, must cater to a range of consumers including faculty, staff, students, and community (Ross & Green, 2000; Wolverton et al., 2000). The challenge is to support administrators to make disability part of their agenda and priorities. A related challenge involves finding a way to develop

administrators' knowledge base about disability. Meeting these challenges can lead to administrators feeling more confident and comfortable about making decisions related to students with disabilities. Partnerships between DSPS and administrators must be forged to define and support the institutions' overall commitment to quality education for all students and access to a barrier-free learning environment.

In addition to identifying areas for training, respondents rated the worth of disability-related information and resources presented in various formats. Guides, handbooks, and directories were the most popular. Individual consultations with faculty mentors or department chairs were not a popular option with administrators in terms of future worth. Yet, these same resources were in the top four for being the most helpful resources utilized in the past. Multimedia formats such as websites and videos also did not appeal to the administrators or DSPS. It appears that administrators prefer references that can be placed on a shelf and easily accessed whenever needed. While websites could provide the same amount of information, and maybe more, this format may be perceived as too complex and difficult to navigate. The traditional hard cover reference may appear to be more straightforward in terms of locating information (i.e., table of contents, index). However, the future is highly electronic and it is important that resources are made available on the Internet as well as in hard cover.

Finally, administrators rated the value of disabilities training they attended in the past. Two formats were identified: (a) information received at staff meetings and (b) one to two hour formal workshops. Administrators participated more in staff meetings than workshops and generally rated the staff meetings more valuable than the workshops. Staff meetings typically require attendance as opposed to workshops that are usually

voluntary. Required attendance may explain the higher participation of administrators in staff meetings as opposed to workshops. Moreover, staff meetings are usually department-specific whereas workshops are typically campus-wide events.

Administrators may perceive the content of staff meetings more relevant to their agenda and situation compared to a general workshop. These findings suggest that administrators are more likely to attend training if it is tailored to their program or department and attendance is mandatory. The length of training is also a consideration. A lot may be accomplished in training that is less than an hour, supplemented with comprehensive materials in the form of guides, handbooks, and directories.

A recurring theme in the analysis was the administrators' recognition of DSPS as the resident expert on disability-related topics. This finding is in marked contrast to other studies that found administrators and faculty were unfamiliar with campus services for students with disabilities (Baggett, 1994; Denny & Carson, 1994; Lewis & Farris, 1999; Stodden, Jessen, & Lolotai, 1998). As indicated earlier, administrators tended to grant DSPS the sole responsibility for processes that required the involvement of other individuals (i.e., student, instructor, advisor). Administrators also rated DSPS sponsored training the most valuable in comparison to training offered by other on campus or off campus groups. The DSPS respondents, on the other hand, felt administrators needed to have more information about their offices and services. Possibly not enough interaction and collaboration is occurring between administrators and DSPS. The findings, however, suggest the positive perception and appreciation administrators have for DSPS professionals. Increased partnerships between the two groups would enhance the state of universities and colleges in regards to students with disabilities. Duffy (1999)

recommends a formula for responding to campus disability issues. The formula involves a “(a) campus-wide network of collaboration and (b) clearly defined set of policies, procedures, and processes for responding to issues affecting faculty, staff, students, and guests” (p. 22). The topic of collaboration is discussed in greater detail in the *Application to Practice* section.

*Personal and professional experience.* Administrators reported a higher degree of contact with students with disabilities than reported in other studies (Baggett, 1994; Houck et al., 1992; McCarthy & Campbell, 1993). The increased contact may reflect the national trend of more students with disabilities pursuing a postsecondary education. Over half of the administrators reported having personal experience with disability through oneself or a significant other. These results may not be representative of administrators in the California Community College system because 66% of those surveyed chose not to participate in the study. The non-respondents may have less experience with individuals with disabilities than the sample in this study; in which case the results may be skewed. On the other hand, the findings may indicate that college administrators are more interactive with their student body compared to administrators from 4-year institutions where most of the previous studies were conducted.

Based on the data collected for this study, there was no significant relationship between disability experience and knowledge. Contact with individuals with disabilities does not necessarily translate to being more informed about issues and topics related to disability. There was a significant relationship between administrators’ need for information and disability experience. The correlation, however, was weak and may indicate that even administrators with many experiences will feel a need to obtain more



information. Conversely, the weak relationship may be a result of the overall low priority administrators place on obtaining information about disability. On the other hand, significant relationships between these variables could exist, but were undetectable due to the sample size.

### *Implications*

The results of this study indicate that administrators are increasingly aware of the needs presented by students with disabilities. Certainly there seems to be more interaction between students with disabilities and administrators than reported in other studies (Baggett, 1994; Houck et al., 1992; McCarthy & Campbell, 1993). The increased interaction can only help to enhance administrators' awareness about the needs of students with disabilities, accommodations, and related services. Administrators may not be as knowledgeable as DSPS professionals, but they are also not as uninformed about the issues related to students with disabilities as reported in prior studies (Getzel, Stodden, & Briel, 2001; Lewis & Farris, 1999; Malakpa, 1997; Thompson, Bethea, & Turner, 1997). Based on the results of this study, college administrators are more aware of the role DSPS plays in supporting students with disabilities on campus. This finding contradicts other studies (Baggett, 1994; Lewis & Farris, 1999; Stodden, Jessen, Lolotai, 1998), in which there existed a lack of awareness about offices serving students with disabilities on campus. In reaching administrators, it would be advantageous to capitalize on administrators' recognition of DSPS as the campus expert on disability.

Training that focuses on disability-related issues should be coordinated by or with DSPS in order to ensure maximum participation of campus administrators. It is not necessary that DSPS provide all the training, but it is critical that the disability service

office be involved in the planning and dissemination of any training focused on disability. Disability trainers should take advantage of the network and partnerships DSPS has already forged with individuals and groups on campus.

Training that is tailored to specific departments or colleges would also increase the chances of administrator participation. Departmental training should be tailored to the specific disability issues faced by administrators and faculty from that department or college. "In order to provide helpful resources for postsecondary [administrators, faculty, and] staff to work more effectively with students with disabilities, information must first be gathered to determine what staff know and want to know about disability issues" (Sheppard-Jones, Krampe, Danner, & Berdine, 2002). The staff may be able to pinpoint areas of interest specific to that department based on dialogue that has occurred with administrators, faculty, and students.

Based on the survey results, training should incorporate information about accommodating students with disabilities. The training should introduce models of successful accommodations and examine the accommodation process specific to that campus. Some background on Section 504 and the ADA may be useful, but emphasis on how to accommodate students with disabilities is important. The concept and practice of universal design should also be introduced to administrators. Universal design for learning is "an approach to designing course instruction, materials, and content to benefit people of all learning styles without adaptation or retrofitting" (Ohio State University Partnership Grant, 2001). Universally designed instruction benefits all students including traditional students, students with disabilities, English language learners, distance

learners, and older students. Incorporating universal design into the curriculum and provision of services is one strategy for advancing barrier-free learning for all students.

Training for administrators must be flexible and accommodating of their needs and schedules. According to the survey results, administrators prefer information be presented during staff meetings as opposed to workshops. Dissemination of information during meetings may be an effective strategy for reaching a majority of the department or college. However, supplemental materials are required in order to provide substantial information that will enhance administrators' knowledge. These materials can be provided in the formats preferred most by administrators (i.e., directory of disability-related services and resources, faculty handbook about students with disabilities).

Although websites on disability-related topics was not a popular choice for either administrators or DSPS, it is worth considering as a format for providing supplemental information. The most effective training for administrators and faculty is one that provides "specific, timely information on an as-needed basis" (Sheppard-Jones, Krampe, Danner, & Berdine, 2002). A website designed for administrators can be as comprehensive and specific as needed. More importantly, it is information that can be accessed on an as-needed basis. If maintained properly, websites are resources that can remain updated as opposed to hard copy references such as directories and handbooks.

Training may not be the only strategy for increasing administrators' knowledge and awareness. A forum for ongoing dialogue between administrators, faculty, DSPS, staff, and students may be useful. The institution's commitment to a barrier-free learning environment may be clarified and outlined through such a forum. Dialogue provides an opportunity to exchange ideas and strategies for effectively meeting the needs of students

with disabilities. A forum can also reveal topics that would be of interest to administrators for more training.

### *Application to Practice*

One of the objectives for this study was to gain insight on strategies to better engage higher education administrators in a proactive effort supporting the recruitment, retention, and graduation of students with disabilities. The findings show administrators recognize and value DSPS as the disability experts on their campuses. Administrators, however, are the recognized leaders of the overall institution. The involvement of administrators in advocating for students with disabilities can be instrumental in: (a) gaining the attention of the higher education community and (b) increasing recognition of the need for enhancing postsecondary education for students with disabilities.

“Advocating for students with disabilities and providing disability representation on appropriate campus committees are clearly essential elements of disability services...but the responsibility [should not] be housed solely in the Office for Students with Disabilities” (Shaw & Dukes, 2001). Collaboration between the administration, DSPS, and the higher education community is critical. Issues surrounding the support of students with disabilities in postsecondary education settings can be complex. The legal mandates of Section 504 and ADA are relatively easy to understand on a theoretical level, but the real challenge occurs in the implementation of the mandates. It is during the implementation stage when troubling questions are usually raised. Questions regarding course waivers and substitutions; the difference between reasonable accommodation and a fundamental program alteration; or the provision of meaningful access while maintaining academic integrity are a few implementation issues. The

answers to such questions and the resolution of related issues require a “participatory process in which all parties accept responsibility for developing solutions that provide opportunities for individuals with disabilities while maintaining the integrity of the programs and services offered” (Heyward, 1993, p. 29). The key players include administrators, DSPS professionals as well as students with disabilities and faculty. The leadership should be initially provided by administrators and expertise provided primarily by DSPS and students with disabilities. As the participatory process evolves the leadership and knowledge will spread to other involved parties such as faculty and staff.

The concept of a participatory process is supported by the five principles of collaboration delineated by Melaville and Blank (1991) as cited in *Using Collaboration* (1996). These five principles involve establishing partnerships between diverse stakeholders; establishing common goals to guide activities; sharing the responsibilities for planning; implementing and evaluating solutions; committing both economic and human resources; and delegating individual responsibilities to facilitate attainment of the shared goals. Embracing and enacting these five principles of collaboration can be instrumental in creating an environment that supports the participation of students with disabilities in higher education. More importantly, embracing such principles within a participatory process can ensure broad support and awareness of disability at all levels starting with the administrators.

*The Role of DSPS.* One of the responsibilities of DSPS will be to inform and educate administrators and other key players on disability and related issues. Increasing the awareness of administrators and faculty is not a new responsibility for DSPS. What is new in the participatory process is the expectation that administrators will take this

information and new knowledge to advocate for students with disabilities. This expectation requires a shift for DSPS in thinking of themselves as “experts and providers to the notion that all campus personnel can become ready and able to meet the needs of students with disabilities” (Meter, 1993); thereby creating a universal learning community. Administrators must start perceiving themselves as knowledgeable and informed about issues and topics related to students with disabilities. This new perception will ultimately require administrators to seek the requisite knowledge and information.

According to the findings, administrators are particularly interested in topics related to accommodations. DSPS can be instrumental in providing or coordinating training for administrators in this area. The training and information must also be presented in a format that is conducive to administrators’ needs and preferences. The potential for increased administrator participation in training may be enhanced by focusing on topics of interest and need as well as in preferred formats.

The findings from this study provide some initial information regarding topics and formats that DSPS can use in designing training for administrators. However, areas of interest will vary across campuses and departments warranting an individualized assessment of each campus’ or department’s training needs. The instrument (in whole or part) from this study may be utilized to conduct these assessments. The training provided by DSPS to the respective administrators can then be tailored to each institution and department.

Finding a way to motivate administrators to take part in the participatory process may be the initial challenge faced by DSPS. Initiating the process with a focus on the

institution's commitment to barrier-free learning for all students, an area in which administrators indicated a high degree of interest, may be a starting point. Examining, clarifying, and fine-tuning the institution's commitment to barrier-free learning may be a way to engage administrators in exploring how their institutions include and impact students of diverse backgrounds. The focus will not be solely on students with disabilities, but they must be included in the agenda. All too often discussions, programs, and policies that focus on diversity leave out disability. Likewise, policies, programs, and training that focus on disability exclude diversity. The concept of barrier-free learning is particularly relevant to connecting disability and diversity. Clarification of the institutions' commitment can benefit all students and thus might motivate administrators to initiate and lead the work in this area.

### *Summary*

A number of the findings in this study contradicted prior studies that also focused on higher education and students with disabilities. The administrators who participated in this study reported having more experiences with students with disabilities, recognized the need for more information about student accommodations, and acknowledged the value and expertise of DSPS professionals. The majority of prior studies were conducted at four-year institutions; whereas this study focused primarily on two-year institutions. The contradictory findings suggest there are some promising developments taking place at two-year institutions, which make it a favorable environment for students with disabilities.

The perceptions and experiences of the administrators and DSPS professionals who participated in this study paint a positive picture of the California Community

College system in relation to students with disabilities. First, administrators reported a higher degree of interaction with students with disabilities compared to prior studies. This finding may be an indication that administrators at two-year institutions are more interactive with their student body than at four-year institutions. Second, administrators were more interested in obtaining information about how to accommodate students with disabilities than about disability legislation. The need for more information about accommodations signifies for administrators: (a) a progression from challenging legislative mandates to an expressed interest in how to meet the spirit of the law and (b) a recognition that changes are needed in the way institutions support students with disabilities. Third, administrators placed a high value on the expertise and support available at the DSPS office. It is unclear if administrators are just passing the responsibility on, but it was evident they wanted to ensure students with disabilities were receiving the best services and the right answers. The next step is to help administrators develop the confidence and necessary knowledge so they can also effectively meet the needs of students with disabilities.

The findings from this study provide a baseline from which DSPS can begin to inform administrators about disability and accommodation so administrators can become stronger advocates for students with disabilities. For example, the instrument utilized in this study can be adapted to further assess the training needs of administrators as well as faculty and staff at respective institutions. Administrators in this study clearly recognized the knowledge and expertise that DSPS professionals possessed. However, it is no longer enough to expect DSPS to assume all the responsibilities related to supporting and advocating for students with disabilities. The increasing enrollment of students with



disabilities in higher education combined with the complexity of questions around support and accommodation dictate the need for institutions to share the responsibility with DSPS. This shared responsibility translates into a participatory process in which all stakeholders assume an active role in supporting and advocating for students with disabilities. Administrators, as the recognized leaders of the institution and one of the primary stakeholders, must be an integral part of this process. The leadership provided by knowledgeable administrators and the expertise of the DSPS professionals can have powerful implications for decision-making, policy development, and organizational change. A first step in realizing these outcomes involves raising the understanding and knowledge that administrators have about students with disabilities to a higher level.

#### *Recommendations for Further Study*

The recommendations listed below are for further research in the area of postsecondary education and students with disabilities.

1. The sample was derived from community colleges in California. Further research involving both two-year and four-year institutions on a national scope would enhance the generalization of this study and provide additional insights.
2. Only administrators and DSPS professionals were surveyed for this study. Further research should be conducted to survey faculty and staff at institutions of higher education.
3. Administrators were not asked to identify their specific office (i.e., faculty affairs, student affairs). Including this inquiry in the instrument would enable

a researcher to make comparisons between administrators with primary responsibilities to students v. faculty.

4. Further research should be conducted to assess administrators' specific knowledge about Section 504 and the ADA to determine if administrators still require more training on legislation.
5. The use of scenarios may be considered for assessing knowledge about accommodating students with disabilities. The persons responsible and steps taken would vary for each scenario.
6. There was no significant relationship between administrators' professional and personal experience with disability and their knowledge about services and supports for students with disabilities. Research should be carried out to further investigate administrators' involvement with students with disabilities (i.e., types of interaction, topics of discussion, duration of contact). Results can then be compared to their knowledge about areas related to students with disabilities.
7. There was no significant relationship between administrators' level of participation in training and their knowledge about services and supports for students with disabilities. Further inquiry into the topics covered at such training may provide additional data that can then be compared to administrators' knowledge scores.
8. In future studies, response rate to the survey may be greater if the instrument is distributed earlier in the semester as opposed to June, which may have conflicted with final exams, graduations, and office closures.

9. Administrator response to the survey may be greater if the instrument is mailed directly to the administrator or the Chancellor's office rather than using the DSPS offices to distribute the instruments on their campuses.
10. Shortening the length of the instrument may generate a higher return rate and more complete surveys.
11. Further research should be conducted utilizing focus groups in which DSPS professionals and administrators can discuss in greater detail the challenges they are confronting regarding students with disabilities as well as their own training and information needs.
12. The area of barrier-free learning should be explored further with higher education administrators, faculty, and staff. Research in this area should include an assessment of the various strategies utilized to meet the diverse student needs and the overall impact on student outcomes.

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## APPENDIX A

### SURVEY INSTRUMENTS

## ADMINISTRATOR SURVEY

### ADMINISTRATOR SURVEY

The following questions (1-6) serve to provide a description of you as an administrator.

1. Please indicate your administrative rank. **(check one)**

<input type="checkbox"/> President	<input type="checkbox"/> Vice President
<input type="checkbox"/> Dean	<input type="checkbox"/> Associate Dean
<input type="checkbox"/> Department Chair	<input type="checkbox"/> Other (please specify): _____

2. Years of post-secondary administrative experience? \_\_\_\_\_ years

3. Please indicate how many students with disabilities you've had direct involvement with during the last four years. **(check one)**

<input type="checkbox"/> None	<input type="checkbox"/> 1-5 students	<input type="checkbox"/> 6-10 students
<input type="checkbox"/> 11-15 students	<input type="checkbox"/> more than 16 students	

4. Listed below are five areas of disability. Please indicate whether you've had direct involvement with students representing one or more of these disability areas. **(check all that apply)**

- ☐ sensory impairment (hearing, speech, vision)
- ☐ physical disability / mobility limitation
- ☐ chronic health impairment (diabetes, heart condition, etc.)
- ☐ specific learning disability
- ☐ psychiatric disability
- ☐ no contact with students with disabilities

5. Using the same five areas listed in question #4, do you consider yourself as having at least one of these disabilities which impairs one or more major life activities? **(check one)**

☐ Yes ☐ No

6. Using the same five areas listed in question #4, are there, or were there, significant others in your life (family, friends) whom you consider as having such a disability? **(check one)**

☐ Yes ☐ No

- 6a. If yes, please indicate your level of involvement. **(check one)**

- ☐ No conversations with significant other regarding disability
- ☐ Discussed with significant other issues/topics related to disability
- ☐ Provided physical and/or emotional support to significant other with disability



7. To the best of your knowledge, who has the responsibility for the following processes (a-g)? **For each item, check as many as you feel apply if you view an item as a shared responsibility.**

	Student with a Disability	Classroom Instructor	Academic Dept. Chair	Univ. Administrator	Disability Support Office	Campus ADA Committee	Student's Off-Campus Legal Rep.	Student's M.D.
a) Documenting whether the student has a disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Deciding on necessary accommodation(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Providing classroom accommodation(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Providing adaptive equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Informing the instructor of the student's disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Informing instructor of the necessary accomod.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Academic advising for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. If a student with a disability enrolls in a class, which of the following steps (a-e) should be taken by the classroom instructor? **(check one for each item)**

a) Contact Disability Support Services for information on accommodations	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) Ask student what accommodations s/he will need	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) Modify instructional techniques, as needed, without fundamentally altering the course	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) Modify testing techniques, as needed, without fundamentally altering the course	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e) Modify required assignments, as needed, without fundamentally altering the course	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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9. Please state your interest in obtaining more information about the following policies, procedures, and services (a-l) for accommodating the needs of students with disabilities at this institution.

I need more information about: (*check one for each item*)

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
a) The admissions process for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) The accommodation process for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Academic counseling for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Counseling & Career Development office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Student Disability Support Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Brown v. Board of Education (1954)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Section 504 of the VR Act of 1973	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Americans with Disabilities Act of 1990	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Programs and services for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Successful models for accommodating students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) This institution's commitment to barrier - free access to the learning environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Other (please specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please state your interest in receiving information on ways to best accommodate students with disabilities participating in the following campus activities or accessing the following services.

I am interested in receiving information about accommodating students with disabilities in the following activities and services: (*check one for each item*)

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
a) Outreach/recruitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Athletics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Campus Clubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Academics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Financial Aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Physical accessibility of campus overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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11. In the past, different types of professional development opportunities regarding students with disabilities may have been offered to personnel on campus. The following items (a-d) pertain to your level of awareness or participation in those sessions: (*check one for each item*)

	No training has occurred	Unaware of training	Aware, did not attend	Attended, not valuable	Attended, very valuable	Personally involved in develop/present training
a) Training offered by your institution's Disability Support Services						
• information received at staff meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• formal workshop (1-2 hours)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Training offered by your department, school/college, or unit						
• information received at staff meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• formal workshop (1-2 hours)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Training offered by any other group within your institution						
• information received at staff meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• formal workshop (1-2 hours)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Training offered by any other group outside your institution						
• information received at staff meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• formal workshop (1-2 hours)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following items (a-l) represent a list of resources to assist classroom instructors in accommodating students with disabilities.

12. Please indicate your feelings about the worth of each in terms of past use: **(check one)**

13. Please indicate your feelings about the worth of each in terms of potential future use: **(check one)**

	Does not Exist	Never Used	Used-Little/No Help	Used-Great Help	No Intention of Using	May be Interested	Very Interested	I could provide valuable input
a) Directory of services and resources available to students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Faculty handbook about students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Handbook with specific ideas about teaching students with disabilities in specific disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Campus newspaper articles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Disability Support Services Newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Guide to adaptive technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Guide to making websites accessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Videos on disability-related topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Websites on disability related topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Individual assistance provided by department chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Consult with a faculty mentor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Other (please specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Please provide any additional comments, concerns, insights and suggestions.

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Thank you so much for your time and valued input.

## DSPS SURVEY

•

## DSPS Survey

Questions 1-7 serve to provide a description of you as a member of DSPS.

1. Which of the following best describes your professional role? **(check one)**

☐ DSPS Coordinator

☐ DSPS Instructor

☐ DSPS Counselor

☐ LD Specialist

☐ Other (please specify title): \_\_\_\_\_

2. Years of DSPS experience? \_\_\_\_\_ years

3. Please indicate your employment status: **(check one for each that applies)**

☐ full time

or

☐ part time?

☐ contract

or

☐ adjunct?

☐ tenure track

or

☐ non-tenure track?

4. Please indicate how many students with disabilities you've had direct involvement with during the last four years. **(check one)**

☐ None

☐ 1-5 students

☐ 6-10 students

☐ 11-15 students

☐ more than 16 students

5. Listed below are five areas of disability. Please indicate the disability area(s) that represent the students you have assisted in accessing the learning environment.  
**(check all that apply)**

☐ sensory impairment (hearing, speech, vision)

☐ physical disability / mobility limitation

☐ chronic health impairment (diabetes, heart condition, etc.)

☐ specific learning disability

☐ psychiatric disability

☐ no contact with students with disabilities

6. Using the same five areas listed in question #5, do you consider yourself as having at least one of these disabilities which impairs one or more major life activities? **(check one)**

☐ Yes

☐ No

7. Using the same five areas listed in question #5, are there, or were there, significant others in your life (family, friends) whom you consider as having such a disability? **(check one)**

☐ Yes

☐ No

- 7a. If yes, please indicate your level of involvement. **(check one)**

☐ No conversations with significant other regarding disability

☐ Discussed with significant other issues/topics related to disability

☐ Provided physical and/or emotional support to significant other with disability

➡ next page ➡

8. To the best of your knowledge, who has the responsibility for the following processes (a-g)? *For each item, check as many as you feel apply if you view an item as a shared responsibility.*

	Student with a Disability	Classroom Instructor	Academic Dept. Chair	Univ. Administrator	Disability Support Office	Campus ADA Committee	Student's Off-Campus Legal Rep.	Student's M.D.
a) Documenting whether the student has a disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Deciding on necessary accommodation(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Providing classroom accommodation(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Providing adaptive equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Informing the instructor of the student's disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Informing instructor of the necessary accomod.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Academic advising for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. If a student with a disability enrolls in a class, which of the following steps (a-e) should be taken by the classroom instructor? (*check one for each item*)

a) Contact Disability Support Services for information on accommodations	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) Ask student what accommodations s/he will need	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) Modify instructional techniques, as needed, without fundamentally altering the course	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) Modify testing techniques, as needed, without fundamentally altering the course	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e) Modify required assignments, as needed, without fundamentally altering the course	<input type="checkbox"/> Yes	<input type="checkbox"/> No

→ next page →

10. The following items (a-l) are asking your opinion about the importance of informing **administrators** about policies, procedures, and services for accommodating the needs of students with disabilities at this institution.

It is important for **administrators** to have information about: *(check one for each item)*

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
a) The admissions process for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) The accommodation process for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Academic counseling for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Counseling & Career Development office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Student Disability Support Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Brown v. Board of Education (1954)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Section 504 of the VR Act of 1973	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Americans with Disabilities Act of 1990	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Programs and services for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Successful models for accommodating students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) This institution's commitment to barrier-free access to the learning environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Other (please specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. The following items (a-h) ask your opinion about the importance of informing **administrators** about how to accommodate students with disabilities who are participating in various campus activities or accessing various services.

It is important for **administrators** to have information about accommodating students with disabilities in the following activities/services: *(check one for each item)*

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
a) Outreach/recruitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Athletics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Campus Clubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Academics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Financial Aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Physical accessibility of campus overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

→ next page →



12. The following items (a-l) represent a list of resources, which could be made available to instructional faculty and administrators. For each of the resources listed below, please state your feeling about the **worth** of each.

It would be useful for faculty and administrators to have: (*check one for each item*)

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
a) Directory of services and resources available to students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Faculty handbook about students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Handbook with specific ideas about teaching students with disabilities in specific disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disability related articles in the campus newspaper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Disability Support Services Newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Guide to adaptive technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Guide to making websites accessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Videos on disability-related topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Websites on disability related topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Individual assistance provided by a department chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Consultation with a faculty mentor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Other (please specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Please provide any additional comments, concerns, insights and suggestions.

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*Thank you so much for your time and valued input.*

**APPENDIX B**  
**LETTERS OF ENDORSEMENT**

**CALIFORNIA COMMUNITY COLLEGES  
CHANCELLOR'S OFFICE**

1102 Q STREET  
SACRAMENTO, CA 95814-6511  
(916) 445-8752  
[HTTP://WWW.CCCCO.EDU](http://www.cccco.edu)



April 5, 2002

Lucinda Aborn  
El Camino College  
16007 South Crenshaw Boulevard  
Torrance, CA 90506

Dear Lucinda:

I am writing this letter to declare the support of the Student Services and Special Programs Division of the California Community College Chancellor's Office for the research you are undertaking, which will look at the current status and trends of services to students with disabilities at California community colleges.

Your research would help establish a baseline of what Disabled Students Programs and Services (DSP&S) Coordinators and Administrators report as their knowledge level in serving students with disabilities. It should also help us identify training needs for DSPS Coordinators and Administrators, and effective ways of disseminating information about students with disabilities to campus administrators and faculty.

This information could benefit individual colleges, as well as the entire community college system in the state. We offer our support in your efforts to complete this research and look forward to seeing the results.

Sincerely,

Judith R. James  
Vice Chancellor  
Student Services Division

cc: Kaylene Hallberg, Acting Dean of Student Services, Chancellor's Office  
Scott Hamilton, DSP&S Coordinator, Chancellor's Office

May 3, 2002

**2001-2002 Executive Board**

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**Interest Group Chairpersons**

**Acquired Brain Injury/Speech-Language**  
*Joseph Giallo - Northern*  
*Sandra Burnett - Southern*  
**Adapted Physical Education:**  
*Charles Keller - Northern*  
*Mary Martin - Southern*  
**Access Technology:**  
*Harriet Eskildsen - Co Northern*  
*Carolyn Fiori - Co Northern*  
*Lyn Clemons - Southern*  
**Career, Employment Transition:**  
*Susan Chan - Northern*  
*Vacant - Southern*  
**Counseling:**  
*Janice McKim - Northern (pending)*  
*Shauna Hagemann - Southern*  
**Deaf/Hard of Hearing:**  
*Debbie Jan Ezersky - Northern*  
*Duane Rumsey - Southern*  
**Developmental Disabilities:**  
*Jane Maringer-Cantu - Northern*  
*Ann Holliday - Southern*  
**Learning Disabilities:**  
*Polly Waathiq - Northern*  
*Maureen Fry - Southern*  
**Program Management:**  
*Dorrie Fisher - Co Northern*  
*Tracey Thomas - Co Northern*  
*Leo Orange - Southern (pending)*

**Committee Chairpersons**

**Convention Chairs:** *Carolyn Fiori*  
*Marie Paparelli*  
**Convention Site Coordinator:**  
*David Sanfilippo*  
**Finance:** *Sharlene Smith, Ellen Young*  
**Legislative:** *Jon James*  
**Liaison to Regional Coordinators:**  
*Dr. Robert Hughlett*  
**Membership:** *Kathleen Buob*  
**Publications:** *Terri Goldstein, Editor*  
*Inge Pelzer, Assistant*  
**Scholarships:** *Janet Shapiro*

Ms. Mari Guillermo  
Interwork Institute  
3590 Camino del Rio North, #105  
San Diego, CA 92108

Dear Mari,

The Executive Board of the California Association on Post-Secondary Education and Disability supports Project Higher Ed., your dissertation project for developing a prototype for training faculty and administrators in strategies and methods for providing service to students with disabilities in higher education.

We understand that this project includes a survey of perceived training/information needs that will be distributed in the community colleges.

This project is especially important and timely at this moment when large numbers of disability services personnel are retiring and leaving the field, taking with them the historical perspective and knowledge base necessary for effective leadership in this area.

We wish you well.

Sincerely,

Ellen Young, President

**APPENDIX C**  
**INSTRUCTIONS TO DSPS COORDINATORS**

May 28, 2002

Dear Colleague:

As part of a study concerning higher education administrators and students with disabilities, we are asking your support by completing the enclosed survey and distributing it to selected individuals at your campus. This research project has the full endorsement of the California Association for Postsecondary Education and Disability (CAPED) and the California Community College Chancellor's Office.

This study will examine the current status and trend of services to students with disabilities at California Community Colleges. The **purpose** of this survey is to:

- (a) investigate administrators' level of awareness about colleges' responsibilities and services related to students with disabilities and
- (b) identify areas in which administrators need more information and training.

As a DSPS coordinator, you have a pivotal role in areas concerning students with disabilities. Thus, we are interested in **your perceptions regarding the information and training you feel administrators need to be more responsive to students with disabilities.**

The survey consists of 13 items and will take 20 minutes or less to complete. All data and survey information will be held in strict confidence. At no time will individual institutions or respondents be associated with their answers. The survey data will be reported in aggregate form.

Your cooperation in **completing the attached survey** is voluntary. For your convenience please use the addressed, stamped envelope to mail your completed survey. A separate envelope has been provided for the **consent form** so that your responses cannot be linked to your identity. Your response is needed by **June 15, 2002.**

We also ask your support in **distributing** the remaining **5 surveys** enclosed in this packet. Instructions pertaining to distribution of the surveys are attached to this memorandum.

If you have any questions, please contact Lucinda Aborn at (310) 660-3296; LABORN@elcamino.cc.ca.us or Mari Guillermo at (619) 594-4054; mguiller@mail.sdsu.edu

Thank you in advance for your participation and support in this important study.  
Sincerely,

Lucinda Aborn  
El Camino College

Mari Guillermo  
San Diego State University

<b>INSTRUCTIONS FOR DISTRIBUTION OF SURVEYS</b>
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**DSPS Personnel**

The “DSPS” envelope contains three identical survey instruments.

- 1) Please be sure that you complete one of these three instruments yourself.
- 2) The two remaining instruments should be completed by a certified staff, which would include individuals such as DSS counselors, LD Specialists, and DSS instructional faculty. The instrument should **not** be completed by classified staff, such as clerical support personnel. Should the number of certified staff in your office number less than three (including yourself), please distribute as many of the surveys as you can.
- 3) The instructions on the instrument direct the respondent to place the completed survey in the attached self-addressed, stamped envelope and mail it by **June 15, 2002**.

**Administrators**

The “Administrator” envelope also contains three survey instruments.

The “administrator” version of the survey differs slightly from DSPS version. Several of the items are identical, but the questions are stated in a way to capture an administrator’s perception regarding disability information and training.

- 1) Please forward one of the instruments to the college president.
- 2) Forward the remaining instruments to two administrators, which would include individuals such as vice presidents of academic affairs, vice presidents of students affairs, deans, and associate deans.
- 3) The instructions on the instrument direct the respondent to place the completed survey in the attached self-addressed, stamped envelope and mail it by **June 15, 2002**.

*NOTE: Copies of the cover letter to the administrators and endorsement letters from the Chancellor’s Office and CAPED are attached for your information.*

**THANK YOU FOR YOUR TIME AND EFFORTS IN THIS REGARD.**

APPENDIX D  
COVER LETTERS



**To:** College Administrator  
**From:** Lucinda Aborn, M.A.  
 El Camino College  
 Mari Guillermo, M.S.  
 San Diego State University  
**Date:** May 28, 2002  
**RE:** Administrator Survey

### **COLLEGES REAP FINANCIAL REWARDS FOR ENROLLING STUDENTS WITH DISABILITIES**

Institutions of higher education benefit financially when students enroll and persist in their colleges. The increasing number of **students with disabilities** pursuing postsecondary education provides an **additional source of revenue** for colleges. In order to reap the financial rewards, however, colleges must first attract students with disabilities to their campuses. To ensure colleges are attractive and responsive to this growing student population, **leadership** is needed from **administrators** (i.e., presidents, vice presidents, deans, and associate deans).

We would like to enlist your participation in a study concerning higher education administrators and students with disabilities. The **purpose** of this study is to:

- (a) investigate administrators' level of awareness about colleges' responsibilities and services related to students with disabilities; and
- (b) identify areas in which administrators need more information and training.

The survey will take 20 minutes or less to complete. All data and survey information will be held in strict confidence. At no time will individual institutions or respondents be associated with their answers. The survey data will be reported in aggregate form.

Your cooperation in **completing the attached survey** is voluntary. For your convenience please use the addressed, stamped envelope to mail your completed survey. A separate envelope has been provided for the **consent form** so that your responses cannot be linked to your identity. Your response is needed by **June 15, 20002**.

If you have any questions, please contact Lucinda Aborn at (310) 660-3296; LABORN@elcamino.cc.ca.us or Mari Guillermo at (619) 594-4054; mguiller@mail.sdsu.edu

Thank you in advance for your participation.

*This research project has the full support of the  
 California Community College Chancellor's Office and the  
 California Association for Postsecondary Education and Disability (CAPED)*

May 28, 2002

Dear Colleague:

As part of a study concerning higher education administrators and students with disabilities, we are asking your support by completing the enclosed survey. This research project has the full support of the California Association for Postsecondary Education and Disability (CAPED) and the California Community College Chancellor's Office.

This study will examine the current status and trend of services to students with disabilities at California Community Colleges. The **purpose** of this survey is to:

- (a) investigate administrators' level of awareness about colleges' responsibilities and services related to students with disabilities and
- (b) identify areas in which administrators need more information and training.

**Administrators** include college presidents, vice presidents of academic affairs, vice presidents of student affairs, deans, and associate deans. As a **certified DSPS staff**, we are interested in your perceptions regarding the information and training you feel administrators need to be more responsive to students with disabilities.

The survey consists of 13 items and will take 20 minutes or less to complete. All data and survey information will be held in strict confidence. At no time will individual institutions or respondents be associated with their answers. The survey data will be reported in aggregate form.

Your cooperation in **completing the attached survey** is voluntary. For your convenience please use the addressed, stamped envelope to mail your completed survey. A separate envelope has been provided for the **consent form** so that your responses cannot be linked to your identity. Your response is needed by **June 15, 2002**.

If you have any questions, please contact Lucinda Aborn at (310) 660-3296; LABORN@elcamino.cc.ca.us or Mari Guillermo at (619) 594-4054; mguiller@mail.sdsu.edu

Thank you in advance for your participation and support in this important study.

Sincerely,

Lucinda Aborn  
El Camino College

Mari Guillermo  
San Diego State University

APPENDIX E  
CONSENT FORM

## CONSENT FORM

### SURVEY OF ADMINISTRATOR KNOWLEDGE AND TRAINING NEEDS REGARDING STUDENTS WITH DISABILITIES

I understand the purpose of this study is to examine the current status and trend of services to students with disabilities at California Community Colleges. The study will investigate the knowledge and information administrators currently possess and need to effectively and appropriately respond to students with disabilities in higher education settings.

I understand the data will be gathered through surveys disseminated to administrators and Disabled Students Services & Programs (DSPS) staff at community colleges throughout California.

I understand the procedure for this study will be as follows:

- Instruments mailed to DSPS coordinators at each California Community College campus.
- Coordinators distribute surveys to two DSS staff, the college president, and two administrators, which may include vice presidents of academic affairs, vice presidents of student affairs, deans, associate deans.
- Respondents complete survey and mail in self-addressed stamped envelope within two weeks of receiving instrument.

I understand the data gathered will help to clarify what information and resources administrators need to be more proactive in responding to students with disabilities.

I understand the survey does not require I identify myself by name or institution. My identity will remain anonymous.

I understand participation in this study is voluntary and I am free to stop participation at any time. Prior to signing this consent form, I can ask questions about the study and receive answers from the Mari Guillermo at (619) 594-4054; mguiller@mail.sdsu.edu

There will be no expense involved in participating in this study.

I, the undersigned, understand these statements and I give consent to my voluntary participation in this study.

\_\_\_\_\_  
Signature of Respondent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Institution

\_\_\_\_\_  
Position

Please sign and mail the Consent Form in the attached self-addressed, stamped envelope.  
DO NOT SEND IN SAME ENVELOPE AS SURVEY.

**APPENDIX F**

**SCORING & STATISTICAL ANALYSIS  
ACCORDING TO RESEARCH QUESTIONS**

Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	Admin	DSPS	
1 – 1a. How informed are college administrators and Disabled Students Programs and Services staff regarding the responsibilities of various academic and community representatives to students with disabilities as mandated by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act?	7a-g	8a-g	Scores for each item (a-g) will be summed for each respondent in the following manner: <ul style="list-style-type: none"> <li>• if a box that should be <u>checked</u> is checked – 1 point</li> <li>• If a box that should be <u>blank</u> is not checked – 1 point</li> </ul> Total possible score range for each item is 0-8 points. Total score range for this question is 0-56.  Mean scores will be calculated for each group.
	8a-e	9a-e	Responses for each item (a-e) will be coded for each respondent in the following manner: <ul style="list-style-type: none"> <li>• correct answer – 1 point</li> <li>• incorrect answer – 0 point</li> </ul> Scores for items a-e will be summed for each respondent. Total possible score range for this question is 0-5 points.  Means scores will be calculated for each group.
1b. Is there a difference between the knowledge of administrators and Disabled Students Programs and Services staff regarding services and supports for students with disabilities?	7a-g  8a-e	8a-g  9a-e	<ul style="list-style-type: none"> <li>• Mean scores for each group (administrator, DSPS) will be calculated</li> <li>• Analysis of variance (ANOVA) will be used to compare group scores.</li> <li>• Analysis of covariance (ANCOVA) will be calculated to adjust for pre-existing differences between groups.</li> </ul>

Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	<i>Admin</i>	<i>DSPS</i>	
2. How much personal and professional experience do administrators have with individuals with disabilities and how much training and resources have they accessed?	3		Responses for each item (1-5) will be coded for each respondent in the following manner: <ul style="list-style-type: none"> <li>• None – 0 point</li> <li>• 1-5 students – 2 points</li> <li>• 6-10 students – 4 points</li> <li>• 11-15 students – 6 points</li> <li>• 16+ students – 8 points</li> </ul>
	4		Responses will be scored for each respondent according to the number of boxes checked. (Exception: a check beside “no contact...” will yield a score of -0-.
	5		Responses will be coded for each respondent in the following manner: <ul style="list-style-type: none"> <li>• Yes – 10 points</li> <li>• No – 0 point</li> </ul>
	6		Responses will be coded for each respondent in the following manner: <ul style="list-style-type: none"> <li>• Yes – 10 points</li> <li>• No – 0 point</li> </ul>
	6a		Responses will be coded for each respondent in the following manner: <ul style="list-style-type: none"> <li>• No conversation... – 0 point</li> <li>• Discussed... – 5 points</li> <li>• Provided support... - 10 points</li> </ul>

Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	<i>Admin</i>	<i>DSPS</i>	
2. (cont'd)	3-6a		<p>Scores for experience (3 – 6a) will be summed for each respondent. Total possible score will range from 0 – 48 points.</p> <p>A correlation coefficient will be calculated using experience scores and knowledge scores of respondents.</p>
	11a-d		<p>Responses for each item (a-d) will be weighted in the following manner:</p> <ul style="list-style-type: none"> <li>• No training has occurred – 0 point</li> <li>• Unaware of training –1 point</li> <li>• Aware, did not attend –2 points</li> <li>• Attended, not valuable –3 points</li> <li>• Attended, very valuable –4 points</li> <li>• Directly involved... – 5 points</li> </ul> <p>Scores for participation (items a-d) will be summed for each respondent. Total possible score range for this question is 0 – 40 points.</p>
	12a-1		<p>Responses for each item (a-l) will be weighted in the following manner:</p> <ul style="list-style-type: none"> <li>• Does not exist – 0 point</li> <li>• Never used – 1 point</li> <li>• Used, but no help – 2 points</li> <li>• Used, great help – 3 points</li> </ul> <p>Scores for resource utilization (items a-l) will be summed for each respondent. Total possible score range for this question is 0 – 36 points.</p>



Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	<i>Admin</i>	<i>DSPS</i>	
2a. Is there a significant relationship between administrators' experience and level of involvement with individuals with disabilities and their reported knowledge regarding services and supports for students with disabilities?	3-6a  7-8		Scores for experience (3 – 6a) will be summed for each respondent. Total possible score will range from 0 – 48 points.  A correlation coefficient will be calculated using experience scores and knowledge scores of respondents.
2b. Is there a significant relationship between administrators' level of participation in disability training opportunities and their knowledge regarding services and supports for students with disabilities?	11  7-8		A correlation coefficient will be calculated using participation scores (question 11) and knowledge scores (questions 7-8) of respondents.
2c. Is there a significant relationship between administrators' utilization of disability resources and their knowledge regarding services and supports for students with disabilities?	12  7-8		A correlation coefficient will be calculated using resource utilization scores (question 12) and knowledge scores (questions 7-8) of respondents.

Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	<i>Admin</i>	<i>DSPS</i>	
3. What information do administrators and Disabled Students Programs and Services staff perceive higher education administrators need to lead efforts towards enhancing colleges' responsiveness to postsecondary students with disabilities?	9a-l	10a-l	<ul style="list-style-type: none"> <li>• Responses for each item will be weighted with <i>strongly agree</i> weighing 5 points and <i>strongly disagree</i> weighing 1 point.</li> <li>• Scores for items a-l will be summed for each respondent. Total possible score range for this question is 12 – 60 points.</li> <li>• Mean scores will be calculated for each item and ranked from highest to lowest need.</li> </ul>
	10a-h	11a-h	<ul style="list-style-type: none"> <li>• Responses for each item will be weighted with <i>strongly agree</i> weighing 5 points and <i>strongly disagree</i> weighing 1 point.</li> <li>• Scores for items a-h will be summed for each administrator. Total possible score range for this question is 8 – 40 points.</li> <li>• Mean scores will be calculated for each item and ranked from highest to lowest need.</li> </ul>

Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	<i>Admin</i>	<i>DSPS</i>	
3. (cont'd)	13a-1		<p>Responses for each item (a-1) will be weighted in the following manner:</p> <ul style="list-style-type: none"> <li>• No intention – 0 point</li> <li>• May be interested – 1 point</li> <li>• Very interested – 2 points</li> <li>• Provide input – 3 points</li> </ul> <p>Scores for items a-1 will be summed for each respondent. Total possible score range for this question is 0 – 36 points.</p> <p>Mean scores will be calculated for each item and ranked from highest to lowest need.</p>
		12a-1	<ul style="list-style-type: none"> <li>• Responses for each item will be weighted with <i>strongly agree</i> weighing 5 points and <i>strongly disagree</i> weighing 1 point.</li> <li>• Scores for items a-1 will be summed for each respondent. Total possible score range for this question is 12 – 60 points.</li> <li>• Mean scores will be calculated for each item and ranked from highest to lowest need.</li> </ul>

Research Question	Data Source: Instrument & Item #		Scoring & Data Analysis
	<i>Admin</i>	<i>DSPS</i>	
3a. Is there a significant difference between administrators' and Disabled Student Service staff's perceptions regarding information administrators need to meet the needs of students with disabilities?	9a-l  10a-h  13a-l	10a-l  11a-h  12a-l	<ul style="list-style-type: none"> <li>• Mean scores on need for each group (administrator, DSPS) will be calculated.</li> <li>• ANOVA will be used to compare group scores.</li> </ul>
3b. Is there a significant relationship between administrators' perceived need for information and their current knowledge regarding services and support for students with disabilities?	9-10, 13  7-8		A correlation coefficient will be calculated using need scores (questions 9-10, 13) and knowledge scores (questions 7-8) for administrators.
3c. Is there a significant relationship between administrators' perceived need for more information and their personal and professional experience with disability?	9-10, 13  3-6a		A correlation coefficient will be calculated using need scores (questions 9 – 10, 13) and experience scores (questions 3-6a) for administrators.